research analysis consultation
EFEH & ASSOCIATES
18918 SAGEWIND DRIVE • HOUSTON, TEXAS 77084 • TELEPHONE (713) 494-2362

October 29, 1991

Mr. S. Stover
Hydro-Environmental Technology, Inc.
Environmental Consultants
P.O. Box 31203
Lafayette, LA 70593-1203

Dear Mr. Stover:

Following are the results of soil sample submitted to our laboratory for analyses on October 25, 1991:

SITE: Lafayette

SAMPLE I.D.	AREA 3 Sample ID# SS2 10/21/91 17:30-18:00
LAB NO.	E-3407
Specific Gravity, g/cc	2.5
Oil & Grease, ppm	160
Color	Brown
Physical State	Solids
Odor	Weak
Layers	Single
Ignitability, °F (Pensky Martens Closed Cup)	>200
Corrosivity, (pH)	7.0
Reactivity - S, mg/kg	No Reaction (<0.01)
Reactivity - CN, mg/kg	No Reaction (<0.01)
Total Solids (Dried Weight), %	95.51

APPEARANCE AFTER TWO TO FOUR HOURS

Layers	1
Solids, %	100
Oil, %	<0.1
Liquid, %	<0.1

EFEH & ASSOCIATES

SAMPLE I.D.	Sample ID# SS2 10/21/91 17:30-18:00
LAB NO.	E-3407

TCLP INORGANICS (Leachate)

Arsenic, mg/l	<0.01
Barium, mg/l	2.62
Cadmium, mg/l	<0.005
Chromium, mg/l	<0.01
Copper, mg/l	<0.01
Lead, mg/l	<0.01
Mercury, mg/l	<0.002
Nickel, mg/l	<0.01
Selenium, mg/l	<0.01
Silver, mg/l	<0.01
Zinc, mg/l	0.04
Thallium, mg/l	<0.06

TCLP ORGANICS

Endrin	<0.005
Lindane	<0.01
Methoxychlor	<0.01
Toxaphene	<0.01
2,4-D	<0.01
2,4,5-TP (Silvex)	<0.01
Benzene	<0.01
Carbon Tetrachloride	<0.01
Chlordane	<0.01
Chlorobenzene	<0.01
Chloroform	<0.01
o-Cresol	<0.01
m-Cresol	<0.01
p-Cresol	<0.01
Cresol	<0.01
1,4-Dichlorobenzene	<0.01
1,2-Dichloroethane	<0.01
1,1-Dichloroethylene	<0.01
2,4-Dinitrotoluene	<0.01
Heptachlor	<0.004
Hexachlorobenzene	<0.01
Hexachloro-1,3-butadiene	<0.01
Hexachloroethane	<0.01
Methyl Ethyl Ketone	<0.01
Nitrobenzene	<0.01
Pentachlorophenol	<0.01

EFEH & ASSOCIATES

SAMPLE I.D.	Sample ID# SS2 10/21/91 17:30-18:00
LAB NO.	E-3407
Pyridine	<0.01
Tetrachloroethylene	<0.01
Trichloroethylene	<0.01
2,4,5-Trichlorophenol	<0.01
2,4,6-Trichlorophenol	<0.01
Vinyl Chloride	<0.01

NOTE: Units expressed in mg/l, unless otherwise noted.

METHOD: HWC - EPA SW-846
TCLP INORGANICS (Leachate) - EPA 1311/7060/7080/7130/7190/7420/7471/7741/7760/7950/7210/7520/7841
TCLP ORGANICS - EPA 8015/8020/8050/8080

Please contact me if you have any questions concerning these results.

Sincerely,

Edwin B. Smith, Jr.

Edwin B. Smith, Jr. PhD

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
Environmental Consultants
P.O. Box 31203
Lafayette, LA 70593-1203
Phone (318) 261-1963 FAX (318) 233-0361

SAMPLE CHAIN OF CUSTODY RECORD

Project Name: City of Lafayette
Project #: 1051.01
Project Location: Lafayette, LA

Laboratory: E[E.H.] Assoc - Houston, TX
ATT: Kim
Sample Collected By: KMM
Company: HET
Date: 10/21/91

Sample I.D.	Type	Date/Time Sampled	Containers	Analysis Requested/ Method	Comments
SS1 (Area 3)	So	10/21/91 @ 18:00 - 18:30	(1) Glass Qt. w/Teflon Lid	Full TCLP and HWC	"Chilled"
SS2 (Area 3)	So	10/21/91 17:30 - 18:00	(1) Glass Qt w/Teflon Lid	Full TCLP and HWC	"Chilled"

Relinquished By: Keith Martin
Date/Time: 10-21-91 @ 18:30

Received By:
Date/Time:

Relinquished By:
Date/Time:

Received By:
Date/Time:

Analysis Due: Verbal: Written:

research analysis consultation
EFEH & ASSOCIATES
10818 SAGEWIND DRIVE • HOUSTON, TEXAS 77089 • TELEPHONE (713) 484-2383

November 4, 1991

Mr. S. Stover
Hydro-Environmental Technology, Inc.
Environmental Consultants
P.O. Box 31203
Lafayette, LA 70593-1203

Dear Mr. Stover:

Following are the results of soil sample submitted to our laboratory for analyses on October 28, 1991:

SITE: Lafayette; LA (SP Property)

PROJECT #: 1051.01

SAMPLE I.D.	AREA 4 SS1 10/24/91 15:30
LAB NO.	E-3441
Specific Gravity, g/cc	1.25
Oil & Grease, ppm	<0.01
Color	Brown
Physical State	Solids
Odor	Weak
Layers	Single
Ignitability, °F (Pensky Martens Closed Cup)	>200
Corrosivity, (pH)	5.8
Reactivity - S, mg/kg	No Reaction (<0.01)
Reactivity - CN, mg/kg	No Reaction (<0.01)
Total Solids (Dried Weight), %	79.18

APPEARANCE AFTER TWO TO FOUR HOURS

Layers	1
Solids, %	100
Oil, %	<0.1
Liquid, %	<0.1

EFEH & ASSOCIATES

SAMPLE I.D.	SS1 10/24/91 15:30
LAB NO.	E-3441

TCLP INORGANICS (Leachate)

Arsenic, mg/l	<0.01
Barium, mg/l	0.09
Cadmium, mg/l	<0.005
Chromium, mg/l	0.16
Copper, mg/l	0.02
Lead, mg/l	0.25
Mercury, mg/l	<0.002
Nickel, mg/l	<0.01
Selenium, mg/l	<0.01
Silver, mg/l	<0.01
Zinc, mg/l	0.60
Thallium, mg/l	<0.06

TCLP ORGANICS

Endrin	<0.005
Lindane	<0.01
Methoxychlor	<0.01
Toxaphene	<0.01
2,4-D	<0.01
2,4,5-TP (Silvex)	<0.01
Benzene	<0.01
Carbon Tetrachloride	<0.01
Chlordane	<0.01
Chlorobenzene	<0.01
Chloroform	<0.01
o-Cresol	<0.01
m-Cresol	<0.01
p-Cresol	<0.01
Cresol	<0.01
1,4-Dichlorobenzene	<0.01
1,2-Dichloroethane	<0.01
1,1-Dichloroethylene	<0.01
2,4-Dinitrotoluene	<0.01
Heptachlor	<0.004
Hexachlorobenzene	<0.01
Hexachloro-1,3-butadiene	<0.01
Hexachloroethane	<0.01
Methyl Ethyl Ketone	<0.01
Nitrobenzene	<0.01
Pentachlorophenol	<0.01

EFEH & ASSOCIATES

SAMPLE I.D.	SS1 10/24/91 15:30
LAB NO.	E-3441
Pyridine	<0.01
Tetrachloroethylene	<0.01
Trichloroethylene	<0.01
2,4,5-Trichlorophenol	<0.01
2,4,6-Trichlorophenol	<0.01
Vinyl Chloride	<0.01

NOTE: Units expressed in mg/l, unless otherwise noted.

VOLATILE

Chloromethane	<1
Vinyl Chloride	<1
Chloroethane	<1
Bromoethane	<1
Trichlorofluoromethane	<1
1,1-Dichloroethane	<1
Methylene Chloride	22
Trans-1,2-Dichloroethene	5
1, 1-Dichloroethane	3
2,2-Dichloropropane	1
CIS-1,2-Dichloroethane	1
Chloroform	5
Bromochloromethane	35
1,1,1-Trichloroethane	3
1,1-Dichloropropene	<1
Carbon Tetrachloride	<1
Benzene	59
1,2-Dichloroethane	3
Trichloroethene	25
1,2-Dichloropropane	<1
Bromodichloromethane	<1
Dibromomethane	1
Cis-1,3-Dichloropropene	<1
Toluene	9
Trans-1,3-Dichloropropene	<1
1,1,2-Trichloroethane	<1
Tetrachloroethene	<1
1,3-Dichloropropane	<1
Dibromochloromethane	<1
1,2-Dibromoethane	<1
Chlorobenzene	<1

EFEH & ASSOCIATES

SAMPLE I.D.	SS1 10/24/91 15:30
LAB NO.	E-3441
1,1,1,2-Tetrachloroethane	<1
Ethyl Benzene	6
M,P-Xylenes	14
O-Xylene	12
Styrene	5
Isopropylbenzene	2
Bromoform	<1
1,1,2,2-Tetrachloroethane	<1
1,2,3-Trichloropropane	<1
N-Propylbenzene	2
Bromobenzene	<1
2-Chlorotoluene	2
1,3,5-Trimethyl-Benzene	3
4-Chlorotoluene	<1
Tert-Butylbenzene	<1
1,2,4-Trimethylbenzene	11
Sec-Butylbenzene	<1
P-Isopropyltoluene	<1
1,3-Dichlorobenzene	<1
1,4-Dichlorobenzene	2
N-Butylbezene	<1
1,2-Dichlorobenzene	28
Xylenes, (Total)	<5
1,2-Dichloroethene	26

NOTE: Units expressed in ug/l, unless otherwise noted.

BASE NEUTRALS

Acenaphthene	<5
Acenaphthylene	<5
Anthracene	<5
Benzidine	<5
Benzo(a)anthracene	<5
Benzo(a)pyrene	<5
3,4-Benzofluoranthene	<5
Benzo(ghi)perylene	<5
Benzo(k)fluoranthene	<5
Bis(2-Chloroethoxy)Methane	<5
Bis(2-Chloroethyl) Ether	<5
Bis(2-Ethylhexyl)phthalate	<5
4-Bromophenyl Phenyl Ether	<5
Butylbenzyl Phthalate	<5

EFFEH & ASSOCIATES

SAMPLE I.D.	SS1 10/24/91 15:30
LAB NO.	E-3441
2-Chloronaphthalene	<5
4-Chlorophenyl Phenyl Ether	<5
Chrysene	<5
Dibenzo(a,h)anthracene	<5
1,2-Dichlorobenzene	<5
1,3-Dichlorobenzene	<5
1,4-Dichlorobenzene	<5
3,3'-Dichlorobenzidine	<5
Diethyl Phthalate	<5
Dimethyl Phthalate	<5
Di-n-butyl Phthalate	<5
2,4-Dinitrotoluene	<5
2,6-Dinitrotoluene	<5
Di-n-octyl Phthalate	<5
1,2-Diphenylhydrazine (as azobenzene)	<5
Fluroranthene	<5
Fluorene	<5
Hexachlorobenzene	<5
Hexachlorobutadiene	<5
Hexachlorocyclopentadiene	<5
Hexachloroethane	<5
Indeno(1,2,3-cd)pyrene	<5
Isophorone	<5
Naphthalene	<5
Nitrobenzene	<5
N-Nitrosodimethylamine	<5
N-Nitrosodi-n-propylamine	<5
N-Nitrosodiphenylamine	<5
Phenanthrene	<5
Pyrene	<5
1,2,4-Trichlorobenzene	<5

NOTE: Units expressed in ug/l, unless otherwise noted.

TPH, mg/kg	107.1

METHOD: HWC - EPA SW-846
TCLP INORGANICS (Leachate) - EPA 1311/7060/7080/7130/7190/7420/7471/7741/7760/7950/7210/7520/7841
TCLP ORGANICS - EPA 8015/8020/8050/8080
TPH - EPA 418.1
VOLATILES - EPA 8240
BASE NEUTRALS - EPA 8270

EFEH & ASSOCIATES

Please contact me if you have any questions concerning these results.

Sincerely,

Edwin B. Smith, Jr. PhD

research analysis consultation
EFEH & ASSOCIATES
10819 SAGEWIND DRIVE • HOUSTON, TEXAS 77089 • TELEPHONE (713) 484-2322

November 4, 1991

Mr. S. Stover
Hydro-Environmental Technology, Inc.
Environmental Consultants
P.O. Box 31203
Lafayette, LA 70593-1203

Dear Mr. Stover:

Following are the results of soil sample submitted to our laboratory for analyses on October 28, 1991:

SITE: Lafayette; LA (SP Property)

PROJECT #: 1051.01

SAMPLE I.D.	AREA 4 SS2 10/24/91 16:00
LAB NO.	E-3442
Specific Gravity, g/cc	1.25
Oil & Grease, ppm	20.0
Color	Brown
Physical State	Solids
Odor	Strong
Layers	Single
Ignitability, °F (Pensky Martens Closed Cup)	>200
Corrosivity, (pH)	5.2
Reactivity - S, mg/kg	No Reaction (<0.01)
Reactivity - CN, mg/kg	No Reaction (<0.01)
Total Solids (Dried Weight), %	81.63

APPEARANCE AFTER TWO TO FOUR HOURS

Layers	1
Solids, %	100
Oil, %	<0.1
Liquid, %	<0.1

EFEH & ASSOCIATES

SAMPLE I.D.	SS2 10/24/91 16:00
LAB NO.	E-3442

TCLP INORGANICS (Leachate)

Arsenic, mg/l	<0.01
Barium, mg/l	0.06
Cadmium, mg/l	<0.005
Chromium, mg/l	<0.01
Copper, mg/l	0.01
Lead, mg/l	<0.01
Mercury, mg/l	<0.002
Nickel, mg/l	<0.01
Selenium, mg/l	<0.01
Silver, mg/l	<0.01
Zinc, mg/l	0.10
Thallium, mg/l	<0.06

TCLP ORGANICS

Endrin	<0.005
Lindane	<0.01
Methoxychlor	<0.01
Toxaphene	<0.01
2,4-D	<0.01
2,4,5-TP (Silvex)	<0.01
Benzene	<0.01
Carbon Tetrachloride	<0.01
Chlordane	<0.01
Chlorobenzene	<0.01
Chloroform	<0.01
o-Cresol	<0.01
m-Cresol	<0.01
p-Cresol	<0.01
Cresol	<0.01
1,4-Dichlorobenzene	<0.01
1,2-Dichloroethane	<0.01
1,1-Dichloroethylene	<0.01
2,4-Dinitrotoluene	<0.01
Heptachlor	<0.004
Hexachlorobenzene	<0.01
Hexachloro-1,3-butadiene	<0.01
Hexachloroethane	<0.01
Methyl Ethyl Ketone	<0.01
Nitrobenzene	<0.01
Pentachlorophenol	<0.01

EFEH & ASSOCIATES

SAMPLE I.D.	SS2 10/24/91 16:00
LAB NO.	E-3442
Pyridine	<0.01
Tetrachloroethylene	<0.01
Trichloroethylene	<0.01
2,4,5-Trichlorophenol	<0.01
2,4,6-Trichlorophenol	<0.01
Vinyl Chloride	<0.01

NOTE: Units expressed in mg/l, unless otherwise noted.

VOLATILE

Chloromethane	<1
Vinyl Chloride	<1
Chloroethane	<1
Bromoethane	<1
Trichlorofluoromethane	<1
1,1-Dichloroethane	<1
Methylene Chloride	6
Trans-1,2-Dichloroethene	<1
1, 1-Dichloroethane	<1
2,2-Dichloropropane	<1
CIS-1,2-Dichloroethane	<1
Chloroform	5
Bromochloromethane	35
1,1,1-Trichloroethane	1
1,1-Dichloropropene	<1
Carbon Tetrachloride	<1
Benzene	27
1,2-Dichloroethane	<1
Trichloroethene	3
1,2-Dichloropropane	<1
Bromodichloromethane	<1
Dibromomethane	<1
Cis-1,3-Dichloropropene	<1
Toluene	6
Trans-1,3-Dichloropropene	<1
1,1,2-Trichloroethane	<1
Tetrachloroethene	4
1,3-Dichloropropane	<1
Dibromochloromethane	<1
1,2-Dibromoethane	<1
Chlorobenzene	<1
1,1,1,2-Tetrachloroethane	<1
Ethyl Benzene	2

EFEH & ASSOCIATES

SAMPLE I.D.	SS2 10/24/91 16:00
LAB NO.	E-3442
M,P-Xylenes	4
O-Xylene	3
Styrene	1
Isopropylbenzene	<1
Bromoform	<1
1,1,2,2-Tetrachloroethane	<1
1,2,3-Trichloropropane	<1
N-Propylbenzene	<1
Bromobenzene	<1
2-Chlorotoluene	<1
1,3,5-Trimethyl-Benzene	<1
4-Chlorotoluene	<1
Tert-Butylbenzene	<1
1,2,4-Trimethylbenzene	2
Sec-Butylbenzene	<1
P-Isopropyltoluene	<1
1,3-Dichlorobenzene	<1
1,4-Dichlorobenzene	<1
N-Butylbezene	<1
1,2-Dichlorobenzene	4
Xylenes, (Total)	<5
1,2-Dichloroethene	<10

NOTE: Units expressed in ug/l, unless otherwise noted.

BASE NEUTRALS

Acenaphthene	<5
Acenaphthylene	<5
Anthracene	<5
Benzidine	<5
Benzo(a)anthracene	<5
Benzo(a)pyrene	<5
3,4-Benzofluoranthene	<5
Benzo(ghi)perylene	<5
Benzo(k)fluoranthene	<5
Bis(2-Chloroethoxy)Methane	<5
Bis(2-Chloroethyl) Ether	<5
Bis(2-Ethylhexyl)phthalate	<5
4-Bromophenyl Phenyl Ether	<5
Butylbenzyl Phthalate	<5
2-Chloronaphthalene	<5
4-Chlorophenyl Phenyl Ether	<5
Chrysene	<5
Dibenzo(a,h)anthracene	<5

EFEH & ASSOCIATES

SAMPLE I.D.	SS2 10/24/91 16:00
LAB NO.	E-3442
1,2-Dichlorobenzene	<5
1,3-Dichlorobenzene	<5
1,4-Dichlorobenzene	<5
3,3'-Dichlorobenzidine	<5
Diethyl Phthalate	<5
Dimethyl Phthalate	<5
Di-n-butyl Phthalate	<5
2,4-Dinitrotoluene	<5
2,6-Dinitrotoluene	<5
Di-n-octyl Phthalate	<5
1,2-Diphenylhydrazine (as azobenzene)	<5
Fluroranthene	<5
Fluorene	<5
Hexachlorobenzene	<5
Hexachlorobutadiene	<5
Hexachlorocyclopentadiene	<5
Hexachloroethane	<5
Indeno(1,2,3-cd)pyrene	<5
Isophorone	<5
Naphthalene	<5
Nitrobenzene	<5
N-Nitrosodimethylamine	<5
N-Nitrosodi-n-propylamine	<5
N-Nitrosodiphenylamine	<5
Phenanthrene	<5
Pyrene	<5
1,2,4-Trichlorobenzene	<5

NOTE: Units expressed in ug/l, unless otherwise noted.

TPH, mg/kg	39.0

METHOD: HWC - EPA SW-846
TCLP INORGANICS (Leachate) - EPA 1311/7060/7080/7130/7190/7420/7471/7741/7760/7950/7210/7520/7841
TCLP ORGANICS - EPA 8015/8020/8050/8080
VOLATILES - EPA 8240
BASE NEUTRALS - EPA 8270
TPH - EPA 418.1

EFEH & ASSOCIATES

Please contact me if you have any questions concerning these results.

Sincerely,

Edwin B. Smith, Jr. PhD

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
Environmental Consultants
P.O. Box 31203
Lafayette, LA 70593-1203
Phone (318) 261-1963 FAX (318) 233 - 0361

SAMPLE CHAIN OF CUSTODY RECORD

Laboratory: EFEH & associates
ATTN Kim
Sample Collected By: KMM / SLS
Company: (HET)
Date: 10-24-91

Project Name: City of Lafayette
Project #: 1051.01
Project Location: LAFAYETTE, LA
(SP Property)

Sample I.D.	Type	Date/Time Sampled	Containers	Analysis Requested/ Method	Comments
SS 1	SO	10-24-91 @ 15:30	1 (8 oz) Glass	1) TPH - 418.1 Full TCLP	Chilled
				Volatile, Semi Organics & Inorganics	0 - 1'
				Plus HWC analysis	
SS 2	SO	10-24-91 @ 16:00	1 (8 oz) Glass	1) TPH - 418.10 Full TCLP	Chilled
				Volatile, Semi Organics and	0 - 1'
				Inorganics Plus	
				HWC analysis	

Relinquished By: Keith Morton
Date/Time: 10-24-91 17:50

Received By:
Date/Time:

Relinquished By:
Date/Time:

Received By:
Date/Time:

Analysis Due: Verbal. Written:

SOUTHERN PETROLEUM LABORATORIES, INC.

LAFAYETTE
P.O. BOX 31780
ZIP 70593 1780
PHONE 318 984 2374

Certificate of Analysis No. X1025506

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
P.O. BOX 31203
LAFAYETTE, LA 70593-1203

S.L. STOVER 10-29-91

Project No:	1051.01
Project:	CITY OF LAFAYETTE
Site:	LAFAYETTE, LA (SP PROPERTY)
Sample No:	SB1 @ 1.5-2.0 BELOW DRAIN BASE AREA 4
Sample of:	SOIL
Sampled by:	HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
Sample Date:	10-24-91, 01:50 PM
Date Received:	10-24-91, 04:15 PM

A N A L Y T I C A L R E S U L T S

PARAMETER	RESULTS	MDL*
Total Petroleum Hydrocarbons Method-Mod.418.1 [EPA Wtr&Wst]	58 mg/kg	6.7 mg/kg

TPH ANALYZED BY : R. BOGER DATE/TIME: 10-25-91, 02:30 PM
TPH EXTRACTED BY : R. BOGER DATE/TIME: 10-25-91, 02:00 PM

Notes: * Method Detection Limit ND = Not Detected. NA = Not Analyzed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control.

SPL, Incorporated

C. A. Guardia

SOUTHERN PETROLEUM LABORATORIES, INC.

LAFAYETTE
P O BOX 31780
ZIP 70593-1780
PHONE 318 984 2374

Certificate of Analysis No. X1025507

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
P.O. BOX 31203
LAFAYETTE, LA 70593-1203

S.L. STOVER 10-29-91

Project No:	1051.01
Project:	CITY OF LAFAYETTE
Site:	LAFAYETTE, LA (SP PROPERTY)
Sample No:	SB2 @ 2.0' BELOW DRAIN BASE AREA 4
Sample of:	SOIL
Sampled by:	HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
Sample Date:	10-24-91, 04:05 PM
Date Received:	10-24-91, 04:15 PM

A N A L Y T I C A L R E S U L T S

PARAMETER	RESULTS		MDL*	
Benzene	1.4	ug/kg	0.2	ug/kg
Toluene	ND	ug/kg	0.2	ug/kg
Ethylbenzene	ND	ug/kg	0.2	ug/kg
Xylenes	1.1	ug/kg	0.2	ug/kg
Method-5030/8020 [SW846]				
Total Petroleum Hydrocarbons	11	mg/kg	6.7	mg/kg
Method-Mod.418.1 [EPA Wtr&Wst]				

BTEX ANALYZED BY : M. STEWART DATE/TIME: 10-28-91, 06:56 PM

TPH ANALYZED BY : R. BOGER DATE/TIME: 10-25-91, 02:30 PM
TPH EXTRACTED BY : R. BOGER DATE/TIME: 10-25-91, 02:00 PM

Notes: * Method Detection Limit ND = Not Detected. NA = Not Analyzed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control.

SPL, Incorporated

C. A. Guardia

LAFAYETTE
P.O. BOX 31780
PHONE 318 984 2374

SOUTHERN PETROLEUM LABORATORIES, INC.

** SPL QUALITY CONTROL REPORT **

BETX MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

SPL Sample ID: X1025504
Matrix: SOIL

Reported on: 10-29-91
Analyzed on: 10-28-91
Analyst: M. STEWART

This sample was randomly selected for use in the SPL quality control program. The results are as follows:

---- SPIKE ANALYSIS ----

Compound	Blank Value ug/kg	Spike Added ug/kg	Original Sample Concentration ug/kg	MS Concentration ug/kg	MS % Rec #	QC Limits Range
BENZENE	ND	50	ND	51	102	39-150
TOLUENE	ND	50	ND	51	102	46-148
ETHYLBENZENE	ND	50	ND	50	100	32-160
m+p-XYLENE	ND	100	ND	98	98	32-160
o-XYLENE	ND	50	ND	49	98	32-160

---- SPIKE DUPLICATE ANALYSIS ----

Compound	Spike Added ug/kg	MSD Concentration ug/kg	MSD % Rec #	% RPD #	QC LIMITS RPD Limit	QC LIMITS Rec. Range
BENZENE	50	51	102	0	20	39-150
TOLUENE	50	51	102	0	20	46-148
ETHYLBENZENE	50	50	100	0	20	32-160
m+p-XYLENE	100	98	98	0	20	32-160
o-XYLENE	50	49	98	0	20	32-160

SPL, Incorporated

John Durand, QC Officer

SOUTHERN PETROLEUM LABORATORIES, INC.

LAFAYETTE
P O BOX 31780
LA 70593 1780
PHONE 318 984 2378

** SPL QUALITY CONTROL REPORT **

Matrix: SOIL

Reported on: 10-28-91
Analyzed on: 10-25-91
Analyst: R. BOGER

This sample was randomly selected for use in the SPL quality control program. Samples chosen are fortified with a known concentration in duplicate. The results are as follows:

TOTAL PETROLEUM HYDROCARBONS [TPH]
Method-Modified 418.1 [45501]

---- SPIKE ANALYSIS ----

SPL Sample ID	Blank Value mg/kg	Spike Added mg/kg	Original Sample Concentration mg/kg	MS Concentration mg/kg	MS % Rec #
X1024420	ND	300.00	11.00	311.00	100

---- SPIKE DUPLICATE ANALYSIS ----

SPL Sample ID	Spike Added mg/kg	MSD Concentration mg/kg	MSD % Rec #	% RPD #
X1024420	300.00	313.00	100	0.6

SPL, Incorporated

John Durand, QC Officer

P O BOX 31780 1800 INVERNESS BLVD SUITE F 459 HUGHES DR P O BOX 846

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
Environmental Consultants
P.O. Box 31203
Lafayette, LA 70593-1203
Phone (318) 261-1963 FAX (318) 233 - 0361

SAMPLE CHAIN OF CUSTODY RECORD

Laboratory: SPL
ATT Sonny
Sample Collected By: Kmm / SLS
Company: HET
Date: 10/24/91

Project Name: City of Lafayette
Project #: 1051.01
Project Location: Lafayette, LA (SP Property)

Sample I.D.	Type	Date/Time Sampled	Containers	Analysis Requested/ Method	Comments
SB1:5-2.0 area 4	So	10/24/91 @ 1350	(1) 16oz Glass Teflon Lid	TPH 418.1D mod.	1.5'-2.0' Below Drain bse.
SB2 2.0' area 4	So	10/24/91 @ 1605	(1) 16 oz Glass Teflon Lid	TPH-418.1D mod	(Below drain Base)
			*	After TPH analysis - please	
				Save Sample.	
				and Call.	
BTEX	added to	SB2		5 W	10-25-91
	as per	Smokey Stover			

Relinquished By: [signature]
Date/Time: 10/24/91 1800/1812
Received By: OSCAR Lorenzo
Date/Time: 10/24/91 1815

Relinquished By:
Date/Time:
Received By:
Date/Time:

Analysis Due: Verbal: Written:

SOUTHERN PETROLEUM LABORATORIES, INC.
ENVIRONMENTAL LABORATORY

LAFAYETTE
P O BOX 31780
ZIP 70593 1780
PHONE 318 984 7331

'L CHEST # _____ DATE 10-24

IENT CHEST: YES/NO

SAMPLE LOGIN CHECKLIST

	YES	NO
1) IS A CHAIN-OF CUSTODY FORM PRESENT:	✓	
2) IS THE COC PROPERLY COMPLETED:		
IF NO, DESCRIBE WHAT IS INCOMPLETE:		
3) HAS CLIENT BEEN CONTACTED ABOUT INCOMPLETE COC:		
4) IS AIRBILL/PACKING LIST/BILL OF LADING ATTACHED TO SHIPMENT:		✓
IF YES, ID#		
5) ARE CUSTODY SEALS PRESENT ON THE PACKAGE:		✓
IF YES, ARE THEY INTACT UPON RECEIPT:		
6) ARE ALL SAMPLES TAGGED OR LABELED:	✓	
DO THE LABELS MATCH THE COC:	✓	
IF NO, HAS CLIENT BEEN CONTACTED ABOUT IT:		
(PLACE SUBSEQUENT DOCUMENTATION FROM CLIENT IN REMARKS)		
7) DO ALL SHIPPING DOCUMENTS AGREE:		
IF NO, DESCRIBE WHAT IS IN NONCONFORMITY:		

8) CONDITION/TEMPERATURE OF SHIPPING CONTAINER:
O.K. / 4°C

9) CONDITION OF SAMPLE CONTAINERS:
OK.

10) SAMPLE DISPOSAL: SPL ✓ RETURN TO CLIENT _____

REMARKS/CONTACT/PHONE/DATE:

O.: Hydro-Elect. Tech RCPTS TO: _____ INV.TO: _____

ROJ #: 1051.01 ATTN: _____ ATTN: _____

ROJ LOC.: LAFAYETTE, LA. ADDR: _____ ADDR: _____

PL REP.: _____ CTY/ST _____ CTY/ST _____

SOUTHERN PETROLEUM LABORATORIES, INC.

LAFAYETTE
P O BOX 31780
ZIP 70593-1780
PHONE 318 984 2374

Certificate of Analysis No. X1009629

HYDRO ENVIRONMENTAL TECHNOLOGY, INC.
104A SAVONNE
LAFAYETTE, LA 70593

SMOKEY STOVER 10-14-91

Project No:	1051.01
Project:	CITY OF LAFAYETTE
Site:	LAFAYETTE, LA
Sample No:	SB1 AREA #1
Sample of:	SOIL
Sampled by:	H.E.T.
Sample Date:	10-08-91, 03:00 PM
Date Received:	10-08-91

A N A L Y T I C A L R E S U L T S

PARAMETER	RESULTS	MDL*
Total Petroleum Hydrocarbons Method-Modified California DHS HIGH BOILER FRACTION - DIESEL	ND mg/kg	3.3 mg/kg

TPH ANALYZED BY : D. CORMIER DATE/TIME: 10-10-91, 03:42 AM
TPH EXTRACTED BY : S. WOOD DATE/TIME: 10-09-91, 01:00 PM

Notes: * Method Detection Limit ND = Not Detected. NA = Not Analyzed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control.

SPL, Incorporated

C. A. Guardia

LABORDE & LABORDE
ATTORNEYS AND COUNSELORS AT LAW

PREMIER BANK TOWER
SUITE 800
200 WEST CONGRESS STREET
P.O. BOX 52564
LAFAYETTE, LOUISIANA 70505-2564

TELEPHONE (318) 232-9928
FAX (318) 232-9907

ELMO J. LABORDE, JR.
LL.M. in Taxation

GREGORY J. LABORDE

July 17, 1993

Mr. Louis R. C. Johnson
Administrator
Ground Water Protection Division
Department of Environmental Quality
P.O. Box 82215
Baton Rouge, LA 70884-2215

Re: Chestnut Street - Environmental Assessment

Dear Mr. Johnson:

Pursuant to your request contained in your correspondence dated July 12, 1993, I am forwarding to you a copy of two environmental assessments of the Chestnut Street site. These are the only assessments which are in my possession.

If you require any additional information, please do not hesitate to contact me.

With kindest regards,

Sincerely yours,

E. J. Laborde, Jr.

Elmo J. Laborde, Jr.
Attorney at Law

Enclosures

State of Louisiana

Department of Environmental Quality

Edwin W. Edwards
Governor

Kai David Midboe
Secretary

July 12, 1993

Mr. Elmo LaBorde
Councilman
City of Lafayette
P.O. Box 52564
Lafayette, Louisiana 70508

Dear Mr. LaBorde:

RE: Chestnut Street - Environmental Assessment

The Ground Water Protection Division (Division) of the Louisiana Department of Environmental Quality received analytical results for soil and ground water samples collected from the public right-of-way on Chestnut Street in Lafayette, Louisiana. In order for the Division to properly review these results, more information is required.

Therefore, the Division requests that any and all reports concerning environmental investigations for the Chestnut Street site in Lafayette, Louisiana be submitted to the Division within 30 days.

Please contact Celeste Bonnecaze of my staff at (504) 765-0585 if there are any questions regarding this matter.

Sincerely,

Louis R. C. Johnson
Administrator
Ground Water Protection Division

LRCJ:CB

c: Acadiana Regional Office, GWPD

FILED THIS 1 DAY OF Feb, 2016
Deputy Clerk of Court

OFFICE OF WATER RESOURCES GROUND WATER PROTECTION DIVISION P O BOX 82215 BATON ROUGE, LOUISIANA 70884-2215
TELEPHONE (504) 765-0585 FAX (504) 765-0602

Main File

Phase III Site Investigation
Southern Pacific Transportation Company Property
and Surrounding Areas
Johnston Street Frontage
Lafayette, Louisiana
January 29, 1992

Prepared for

Mr. Ray Desormeaux
Consultant - City of Lafayette, Louisiana

By

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
104 R. Savonne Drive
Scott, Louisiana
70583
(318) 261-1953

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INTRODUCTION

Previous Investigations

In October, 1991, C. H. Fenstermaker and Associates, Inc. ("Fenstermaker") conducted a Phase I Environmental Site Assessment for the City of Lafayette on the Southern Pacific Transportation Company property with frontage along Johnston Street in Lafayette, Louisiana. Conclusions in this report indicated that areas of the property had potential for environmental concerns and warranted further investigation.

Hydro-Environmental Technology, Inc. (HET) was contacted in the month of October, 1991 to investigate selected areas of the property described by the Fenstermaker report as needing additional investigation. This investigation was conducted at the request of Mr. E. R. Desormeaux, Consultant for the City of Lafayette, Louisiana.

In November, 1991 HET submitted a Phase II Site Investigation Report of the above described property to the City of Lafayette. This report indicated that soil contamination existed on the property and the highest concentrations were reported along the northern portion of the property.

Due to the nature of a potential property acquisition, an investigation was initiated on November 15, 1991 to aid in determining the horizontal and possibly the vertical extent of soil contamination at this property and surrounding areas.

Site Description

The Southern Pacific Transportation Company property investigated ("the site") is located within the city limits of Lafayette, Louisiana. The site is geographically described as Section 67, Township 9 South, Range 4 East, Lafayette Parish, Louisiana (Figure 1). This site is bound on the north by Chestnut Street, on the south by Southern Pacific Transportation Company railroad tracks, on the east by Johnston Street and on the west by Lee Street. Located on this 5.1061 acre parcel of land are one building structure, concrete slabs or the remnants of the slabs, spot paving and open vegetated acreage.

During this investigation, the site property boundaries were determined by the City of Lafayette survey crews. During this investigation soil samples were collected on the site and what appears to be public right-of-way property along the south side of Chestnut Street. This seemly public right-of-way formed the northern property boundary with the site and is located between the site and Chestnut Street. Therefore, this report will aid in determining soil conditions on the site and on the public right-of-way property.

METHOD OF INVESTIGATION AND RESULTS OF ANALYSIS

Dates and Methodology of Sample Collection

On November 13 and 14, 1991, HET installed nine (9) soil borings and collected six (6) soil samples and one (1) groundwater sample for laboratory analysis. On November 26 and 27, 1991, HET installed nineteen (19) soil borings and collected thirteen (13) soil samples for laboratory analysis. As a note, Charlotte Skidmore, Environmental Quality Test Manager, Department of Public Works, City of Lafayette and Bob Taeger, Regional Environmental Coordinator, Southern Pacific Transportation Company, were on-site and observed all soil samples collected and the location of the samples.

All soil samples were collected when manual bucket augers had been drilled to predetermine depths and were removed from the created three (3) inch diameter borehole. A shelby tube sampler was inserted into the created borehole and was driven to the prescribed depths. Soil samples were extracted from the shelby tube by HET personnel utilizing new latex disposal gloves. All samples collected were properly containerized, labeled, chilled and transported either to EFEH and Associates Laboratories, Inc. in Houston, Texas or Southern Petroleum Laboratories in Lafayette, Louisiana. Proper decontamination procedures utilizing isopropyl alcohol and deionized water were conducted on bucket augers and shelby tube sample equipment prior to and between each sample collection.

A generalized illustration of areas investigated and soil boring locations are presented in Figure 2.

AREA 4

The area investigated in the northern portion of the property was designated as Area 4 (Figures 2 and 3). This area of the site is located along Chestnut Street and the public right-of-way forms the northern property boundary. This area contains a concrete slab, associated catch basin and discharge piping leading into on-site wooden drain(s) These drains are constructed with treated lumber and have a top, two sides and apparently no bottom. Little information was obtained on this portion of the property. Information received indicated that this concrete slab was once utilized as a foundation for a lumber yard and possibly paint storage. However, the use of the catch basin and associated piping as well as containment curbing around the slab was not determined.

The investigation in Area 4 was directed toward determining the environmental impacts from the on-site wooden drain(s). On November 13, 1991, HET installed four (4) soil borings (SB1-SB4) at the site for the purposes of determining soil conditions. Soil boring SB1 was installed to determine background site soil conditions. This boring was located west of the wooden drain area (Figure 3). Soil boring SB2 was located to the northwest and outside of the drain area (Figure 3). Soil boring SB3 was installed in the drain and in a down gradient position from the discharge line. Soil boring SB4 was installed directly in the drain area and along the northern property boundary.

Soil encountered during drilling operations were screened with a portable HNU 101 photo-ionization detector (PID). PID readings of soil samples collected ranged between 0 and 5 parts per million. Soil samples collected from soil borings SB1-SB3 were collected at depths of two to three feet below land surface (Figure 3). However, the soil sample collected during the installation of soil boring SB4 was collected at depth of seven to eight feet below land surface (Figure 3). Only soil samples collected during the installation of soil borings SB1 and SB4 were properly containerized, labeled, chilled and transported to EFEH and Associates Laboratory in Houston, Texas for analysis of total petroleum hydrocarbons (TPH) by EPA Method 418.10, total metals content and volatile organic constituents by EPA Method 8240. Complete laboratory analysis and chain of custody records are contained in Appendix A.

Laboratory analysis indicates that soil sample collected during the installation of soil boring SB1 contained a TPH concentration of 16.0 milligrams per kilograms (mg/kg), a total chromium concentration of 16.07 mg/kg and a zinc concentration of 24.0 mg/kg. Additionally, this sample did contained several volatile organic parameters such as Methylene chloride 7.0 micrograms per liter (ug/l), chloroform 3.0 ug/l, 1,1,1-Trichloromethane 10.0 ug/l and a total xylene concentration of 2.0 ug/l (Appendix A).

Laboratory analysis indicated that soil sample SB4 collected at a depth of 7 to 8 feet below land surface contained a TPH concentration of 9.7 mg/kg, a chromium concentration of 14.11 mg/kg, and a zinc concentration of 14.71 mg/kg. However, several volatile organic parameters were detected in this sample. Parameters such as Trichlorofluoromethane 7.0 ug/l, Methylene Chloride 3.0 ug/l, Bromochloromethane 36.0 ug/l and 1,2, 1,3, and 1,4 Dichlorobenzene concentrations of 2.0 ug/l, were detected in this sample (Appendix A).

Additionally, on November 13, 1991, HET installed two (2) soil borings (SB5 and SB6) in Area 4 for purposes of collecting soil samples below the apparent bottom of the drain. These soil samples were collected on what appeared to be public right-of-way property (Figure 3). During this investigation and in this particular area, a second wooded drain with similar construction was encounter below the first drain. This deeper drain was encountered at approximately five (5) feet below land surface. The area along this drain was excavated by the City of Lafayette personnel. The depth of the excavation was approximately eight (8) feet below land surface. Soil boring SB5 was installed below the apparent bottom of the drain and in the excavated area (Figure 3). The soil sample collected during the installation of soil boring SB5 was at a depth of 10 to 11 feet below land surface. Soil boring SB6 was installed on the opposite or northwest side of the excavation. This soil boring was installed to below the drain base. The soil sample collected during the installation of this boring was at a depth of 9.5 to 10.5 feet below land surface. Soil samples collected from the soil borings were properly containerized, labeled and transported to EFEH and Associates Laboratory in Houston, Texas for analysis of TPH by EPA Method 418.10, total metals content and volatile organic constituents by EPA Method 8240. Laboratory analysis and chain of custody records for soil samples analyzed are contained in Appendix A.

The soil sample collected during the installation of soil borings SB5 at a depth of 10 to 11 feet below land surface and apparently off-site contained a TPH concentration of 7.4 mg/kg, a chromium concentration of 6.27 mg/kg and a zinc concentration of 14.21 mg/kg. Volatile organic constituents reported by the laboratory in this sample were as follows: Methylene Chloride 30.0 ug/l, Bromochloromethane 38.0 ug/l, benzene 126.0 ug/l, toluene 76.0 ug/l, tetrachloroethane 131.0 ug/l, ethylbenzene 122.0 ug/l, total xylene 335.0 ug/l, styrene 39.0 ug/l, 1,3 dichlorobenzene 592.0 ug/l, 1,4 dichlorobenzene 567.0 ug/l (Appendix A).

Laboratory analysis indicated that the soil sample collected at a depth of 9.5 to 10.5 feet below land surface during the installation of soil boring SB6 contained a TPH concentration 9.7 mg/kg and a chromium concentration of 6.27 mg/kg and a zinc concentration of 25.61 mg/kg. The volatile organic constituents report for this sample were as follows: bromochloromethane 37.0 ug/l, benzene 2.0 ug/l, total xylene 6.0 ug/l and 1,3,5 Trimethyl-benzene 7.0 ug/l (Appendix A).

AREA 5

The area investigated designated as Area 5 is located 90 feet east-southeast of Area 4. This area investigated consisted of a wooden drain similar in construction to the drain in Area 4. This drain occurred approximately eight (8) inches below land surface and was constructed with a wooden top, sides and selected portions contained a slatted wooden bottom. This drain was observed originating on the site and heading in a northerly direction where it was connected to the City of Lafayette Storm Sewer system. Two soil borings (SB1 and SB2) were installed in the drain to collect soil samples (Figure 4). Soil boring SB1 was installed in the central portion of the drain. A soil sample was collected at two to three feet below land surface during the installation of soil boring SB1 (Figure 4). Soil boring SB2 was installed near the connection of this drain and the City of Lafayette storm sewer piping and a soil sample was collected at depths of two to three feet below land surface. The soil sample collected during the installation of soil boring SB1 was the only sample transported to EFEH and Associates, Inc. in Houston,

Texas for analysis of TPH by EPA Method 418.10, total metals content and volatile organic constituent by EPA Method 8240.

Laboratory analysis indicated this sample contain a TPH concentration of 41.30 and total metals content of lead 33.07 mg/kg and zinc 157.59 mg/kg. Laboratory analysis indicated that several volatiles organic constituents were present and were reported as follows: methylene chloride 132.0 ug/l, benzene 102.0 ug/l, toluene 57.0 ug/l, tetrachloroethane 101 0 ug/l, ethylbenzene 101.0 ug/l, total xylene 254 0 ug/l, 1,3,5, trimethylbenzene 217.0 ug/l and 1,2,4 trimethlybenzene 67.0 ug/l (Appendix A).

AREA 6

The area investigated designated as area 6 was located in what appears to be public right-of-way property. This area is located approximated 310 feet east-southeast of Area 5 and located near the intersection of Chestnut Street and Seventh Street (Figure 5). An excavation was created by the City of Lafayette to determine if the deep wooden drain oriented parallel to Chestnut Street occurred in this area. The wooden drain located in this area appears to be connected to the deeper drain system identified in Area 4. One soil boring (SB1) was installed in the excavation to collect a soil sample below the wooden drain (Figure 5). During the installation of soil boring SB1, one soil sample was collected at a depth of 7.5 to 8.5 feet below land surface. This sample was transported to EFEH and Associated, Inc. for laboratory analysis of TPH by EPA Method 418.10, total metals content and volatile organic constituents by EPA Method 8240.

Laboratory analysis indicates that this sample contains a TPH concentration of 24.7 mg/kg and total metal concentrations of lead 11 92 mg/kg and zinc of 20.00 mg/kg. Laboratory analysis indicated that selected volatile organic parameters were detected and were reported as follows: Bromochloromethane 37.0 ug/l, benzene 5.0 ug/l, toluene 4.0 ug/l, ethyl benzene 7.0 ug/l, total xylene 17.0 ug/l, 1,2,4 trimethylbenzene 16 0 ug/l and 1,2 dichlorobenzene 33.0 ug/l (Appendix A).

During the drilling operations of soil boring SB1, groundwater was encountered at approximately 8 5 feet below land surface. On November 14, 1991 a groundwater sample was collected from the

borehole created during the drilling of soil boring SB1. The groundwater sample was collected utilizing a new disposable polyethylene bailer. The sample was containerized in two (2) amber quart glass containers and two (2) 40 milliliter glass vials. The groundwater sample was identified as SB1 and transported to EFEH and Associates Inc. in Houston, Texas for analysis of Ph, total dissolved solids, TPH by EPA Method 418.10, total organic halogens (TOX), total metals content, volatile organic constituents by EPA Method 624 and base neutrals/acid extractable compounds by EPA Method 625.

Laboratory analysis indicates that this groundwater sample contained a pH of 6.1, a TPH concentration 29 2 mg/l, a total dissolved solids context of 240 mg/l and a TOX concentration of 2.0 mg/l. This sample contained a chromium concentration of 0.07 mg/l, a lead content of 0.16 mg/l and a zinc content of 0.40 mg/l. This groundwater sample contained several volatile organic constituents and were reported as follows: benzene 83.0 ug/l, chloroform 6.0 ug/l, ethylbenzene 7.0 ug/l, tetrachloroethane 83.0 ug/l, toluene 127 0 ug/l and 1,1,1 tricholoethane 5.0 ug/l. All parameters analyzed in this groundwater sample as base neutral/acid extractable compounds were reported as below the practical quantification limit. (Appendix A).

As a note, the laboratory analysis of soil samples collected in Areas 4, 5 and 6 as well as the groundwater sample collected from soil boring SB1 in Area 6 was submitted to the Louisiana Department of Environmental Quality (LDEQ), Baton Rouge Regional Office. The City of Lafayette submitted this information to the LDEQ through written correspondence dated December 10, 1991. This written correspondence was directed to the Office of Solid and Hazardous Waste and the Office of Water Resources.

SOIL BORINGS SB1 - SB11

On November 26 and 27, 1991 HET installed nineteen (19) soil borings across the Southern Pacific Transportation Property to determine on-site soil conditions at a depth of 1.5 feet below land surface. All soil samples collected during this sampling event were collected utilizing the same manual methods

as previously described. All soil samples collected during this sampling event were transported to Southern Petroleum Laboratories, Inc. in Lafayette, Louisiana for analysis of TPH by EPA Method 418.10, benzene, ethylbenzene, toluene and xylene (BETX) by EPA Method 8020, total metals content and volatile organic constituents (VOC) by EPA Method 8010.

SOIL BORING SB1

Soil boring SB1 was installed in the northern section of the property, approximately 31 feet south of the eastern most wooden drain identified in Area 5 (Figure 6). Soil boring SB1 was installed to a depth of five below land surface. The soil sample collected during the installation of this boring was collected at a depth of five (5) to six (6) feet below land surface. This soil boring was installed to this depth to aid in determining the possible southern extent of the north-south wooden drainage system in this area.

Laboratory analysis indicated that this sample contained a TPH concentration of 19.0 mg/kg, a BETX concentration below practical quantification limits, a barium concentration of 175.0 mg/kg, a lead concentration of 513.0 mg/kg, a mercury concentration of 1.859 mg/kg and no VOC parameters above the respective detection limits (Appendix A).

SOIL BORING SB2

Soil boring SB2 was installed in the northern portion of the property, approximately 37 feet south-southwest of the concrete slab described in Area 4 (Figure 6). During the installation of soil boring SB2, soil samples were collected at depths of 0 to 1.0 feet below land surface and depths of 1.5 to 2.5 feet below land surface for laboratory analysis. Laboratory analysis indicated that the soil sample collected at a depth of 0 to 1.0 feet below land surface contained a TPH concentration of 120.0 mg/kg, a BETX concentration below the practical qualification limit, a barium concentration of 194.0 mg/kg, a lead concentration of 461.0 mg/kg and no VOC parameters above the respective detection limits (Appendix A).

The soil sample collected at a depth of 1.5 to 2.5 feet below land surface during the installation of soil boring SB2 contained TPH and BETX concentrations below the practical quantification limits, a barium concentration of 135.0 mg/kg, a lead concentration of 14.0 mg/kg and no VOC parameters above the respective detection limits (Appendix A).

SOIL BORING SB3

Soil boring SB3 was installed in a surface depression in the eastern portion of the site (Figure 7). The soil sample collected during the installation soil boring SB3 was collected at a depth of 1.5 to 2.5 feet below land surface. Laboratory analysis indicated that this soil sample contained a TPH concentration of 18.0 mg/kg, and no BETX concentrations above the practical quantification limit, a barium concentration of 137.0 mg/kg, a lead concentration of 37.0 mg/kg and no VOC parameters above the respective detection limit (Appendix A).

During the installation of soil boring SB3, numerous objects were encountered and the City of Lafayette excavated a ten foot by ten foot area in the vicinity of soil boring SB3. Removed from this area were lumber, concrete, trees and other various types of refuse. The excavation was conducted to a depth of 6.5 feet below land surface. Once the excavation bottom was removed of refuse, one (1) soil sample (P1) was collected in the bottom of the pit. This soil sample (P1) was collected at a depth of 6.5 to 7.5 feet below land surface. Laboratory analysis indicated no TPH and BETX concentrations above the practical quantification limits, a barium concentration of 181.0 mg/kg, a lead concentration of 10.0 mg/kg and no VOC parameters above the respective detection limits (Appendix A).

SOIL BORING SB4

Soil boring SB4 was installed in the extreme eastern portion of the property approximately 61 feet west-northwest of the center line of Johnston Street (Figure 7). This soil boring was installed to a depth of five (5) feet below land surface. During the installation of soil boring SB4, a soil sample was collected at a depth of 1.5 to 2.5 feet below land surface. Laboratory analysis indicated that this sample contained

a TPH concentration of 18.0 mg/kg, a BETX concentration below the practical quantification limit, a barium concentration of 84.0 mg/kg, a lead concentration of 15 0 mg/kg and no VOC analyzed parameters above the method detection limit (Appendix A).

SOIL BORING SB5

Soil boring SB5 was located east-southeast of soil boring SB4 and approximately thirty-five (35) feet northwest of the center line of Johnston Street (Figure 7). This soil boring was installed to a depth of two and a half (2.5) feet below land surface and a soil sample was collected at a depth of 1.5 to 2.5 feet below land surface Laboratory analysis indicated that this sample contained a TPH concentration of 45.0 mg/kg, no BETX compounds above the practical quantification limit, a barium concentration of 293.0 mg/kg, a lead concentration of 15.0 mg/kg and VOC parameters above the respective detection limit (Appendix A).

SOIL BORING SB6

The soil sample identified as SB6 was formulated by installing four (4) soil borings SB6A-SB6D around an isolated concreted slab in the central portion of the site (Figure 8). These soil borings were installed to a depth of two and a half (2.5) feet below land surface. Soil samples were collected during the installation of each boring at a depth of 1.5 to 2.5 feet below land surface. These soil samples were composited on-site to formulated soil sample SB6.

Laboratory analysis indicated that this composite soil sample contained TPH and BETX concentrations below the practical quantification limit, a barium concentration of 211.0 mg/kg, a lead concentration of 37 0 mg/kg and no VOC parameters above the respective detection limits (Appendix A).

SOIL BORING SB7

Soil boring SB7 was installed in the western portion of the property. This soil boring was located along the western perimeter of a large concrete slab outline (Figure 9). Several attempts were conducted before successfully installing this boring due to the concrete and backfill in the area. Soil boring SB7 was installed to a depth of 2.5 feet below land surface and a soil sample was collected at a depth of 1.5 to 2.5 feet below land surface Laboratory analysis indicated that this sample contained TPH and BETX concentrations below the practical qualification limit, a barium concentration of 109.0 ms/kg, a lead concentration of 16.0 mg/kg and no VOC parameters above the respective detection limit (Appendix A).

SOIL BORING SB8

The soil sample identified as SB8 was formulated by installing four (4) soil borings SB8A - SB8D around the perimeter of an identified concrete slab in the southern portion of the site (Figure 10). These soil borings were located in the southern portion of the property, approximately fifty-four (54) feet north-northeast of the on-site railroad tracks. These soil borings were installed to a depth of 2.5 feet below land surface. Soil samples were collected during the installation of these borings at a depth of 1.5 to 2.5 feet below land surface. These collected soil samples were composite on-site to formulate soil sample SB8. Laboratory analysis indicated that composite soil sample SB8 contained a TPH concentration of 790 0 mg/kg, no BETX concentration above the practical quantification limit, a barium concentration of 186 0 mg/kg, a lead concentration of 241.0 mg/kg and no VOC parameters above the respective detection limit (Appendix A).

SOIL BORING SB9

The soil sample identified as SB9 was formulated during the installation of Soil borings SB9A - SB9C (Figure 11). These soil borings were installed along the perimeter of a concrete slab and associated concrete in the extreme southern portion of the property. This concrete slab is located approximately 54 feet north-northeast of the on-site railroad tracks. Soil borings SB9A - SB9C were

installed to depths of 2.5 feet below land surface. Soil samples were collected during the installation of each soil boring at a depth of 1 5 to 2.5 feet below land surface. These soil samples were composited on-site to formulate composite soil sample SB9. Laboratory analysis indicated that this sample contains a TPH concentration of 120.0 mg/kg, no BETX concentration above the practical quantification limit, a barium concentration of 199.0 mg/kg, a lead concentration of 461.0 mg/kg and no VOC parameters above the respective detection limits (Appendix A).

SOIL BORING SB10

Soil boring SB10 was installed in the southern portion of the property approximately 38 feet east-southeast of the concrete slab area investigated with soil borings SB9A - SB9C. This soil boring is located along the southern site boundary approximately 48 feet north-northeast of the railroad tracks (Figure 12). This soil boring was installed to a depth of 2.5 feet below land surface. The soil sample collected during the installation of soil boring SB10 was collected at a depth of 1.5 to 2.5 feet below land surface Laboratory analysis indicates this soil sample contains a TPH concentration of 820.0 mg/kg, a benzene concentration of 0.0045 mg/kg, a toluene concentration of 0.0037 mg/kg and no ethylbenzene and toluene concentration above the practical quantification limit, a arsenic concentration of 10 2 mg/kg, a barium concentration of 109.0 mg/kg, a lead concentration of 165.0 mg/kg and no VOC parameters above the respective detection limits (Appendix A).

SOIL BORING SB11

Soil boring SB11 was installed in the extreme southern corner of the site (Figure 12). This soil boring was installed to a depth of 2.5 feet below land surface and the soil sample collected during the installation of this boring was at a depth of 1.5 to 2.5 feet below land surface. Laboratory analysis indicates this sample contains a TPH concentration of 18.0 mg/kg, a BETX concentration of 0 0145 mg/kg, a barium concentration of 87.0 mg/kg, a lead concentration of 141.0 mg/kg and no VOC concentration above the respective detection limits (Appendix A).

CONCLUSIONS

Data collected during this Phase III Site Investigation conducted at the Southern Pacific Transportation Company property and surrounding areas indicated that soil and groundwater contamination is present in selected portions of the property.

Volatile organic constituent soil contamination is present on the Southern Pacific Transportation Company property and extends to a depth of seven to eight feet below land surface in the northern portion of the property (Areas 4 and 5). The source of contamination in the northern portion of the property can possibly be attributed to past commercial activities and the disposal of waste and wastewater through a series of wooden drains and/or wooden drainage systems.

Soil contamination in the southern portion of the South Pacific Transportation Company property extends at least to a depth of 1.5 to 2.5 feet below land surface and consists of hydrocarbon based compounds, selected metals and minor BETX concentrations (Soil Borings SB8, SB9, SB10 and SB11). Soil contamination contained in this portion of the property can possibly be attributed to past spillage, drippage and past commercial activities.

The remaining portions of the Southern Pacific Transportation Company property have analyzed parameter concentrations at or slightly above what appears to be background soil conditions.

Soil and groundwater contamination is present on what appears to be public right-of-way property. The right-of-way property forms the northern site boundary and is located between the site and Chestnut Street. Volatile organic constituent contaminates in this portion of the property were reported in the soil at depths of 10 to 11 feet below land surface (Area 4). The only groundwater sample collected on the right-of-way property contained a lead and chromium content and listed volatile organic constituent concentrations above the United States Environmental Protection Agency Primary Drinking Water Standards (Area 6). The source of contamination in the seemly public right-of-way property can possibly be attributed to the migration of various substances through the apparent bottomless wooden drain system oriented parallel to Chestnut Street.

This report is based on laboratory and field data collected on November 15, 1991 to January 10, 1992 and information received from the client, representatives of the client and other responsible parties. All conclusions are based on available information cited herein, and should be reviewed within this context. Should conditions at the site in question change, or additional information become available, especially with regard to prior site conditions, it may be necessary to modify these conditions and recommendations accordingly in the future.

REFERENCES

Phase I Environmental Site Assessment, October, 1991; Prepared for the City of Lafayette, Louisiana. C. H. Fenstermaker and Associates, Inc 38p.

Phase II Site Investigation, Southern Pacific Transportation Company Property: Johnston Street Frontage, November 06, 1991. Hydro-Environmental Technology, Inc. 60p.

FIGURES

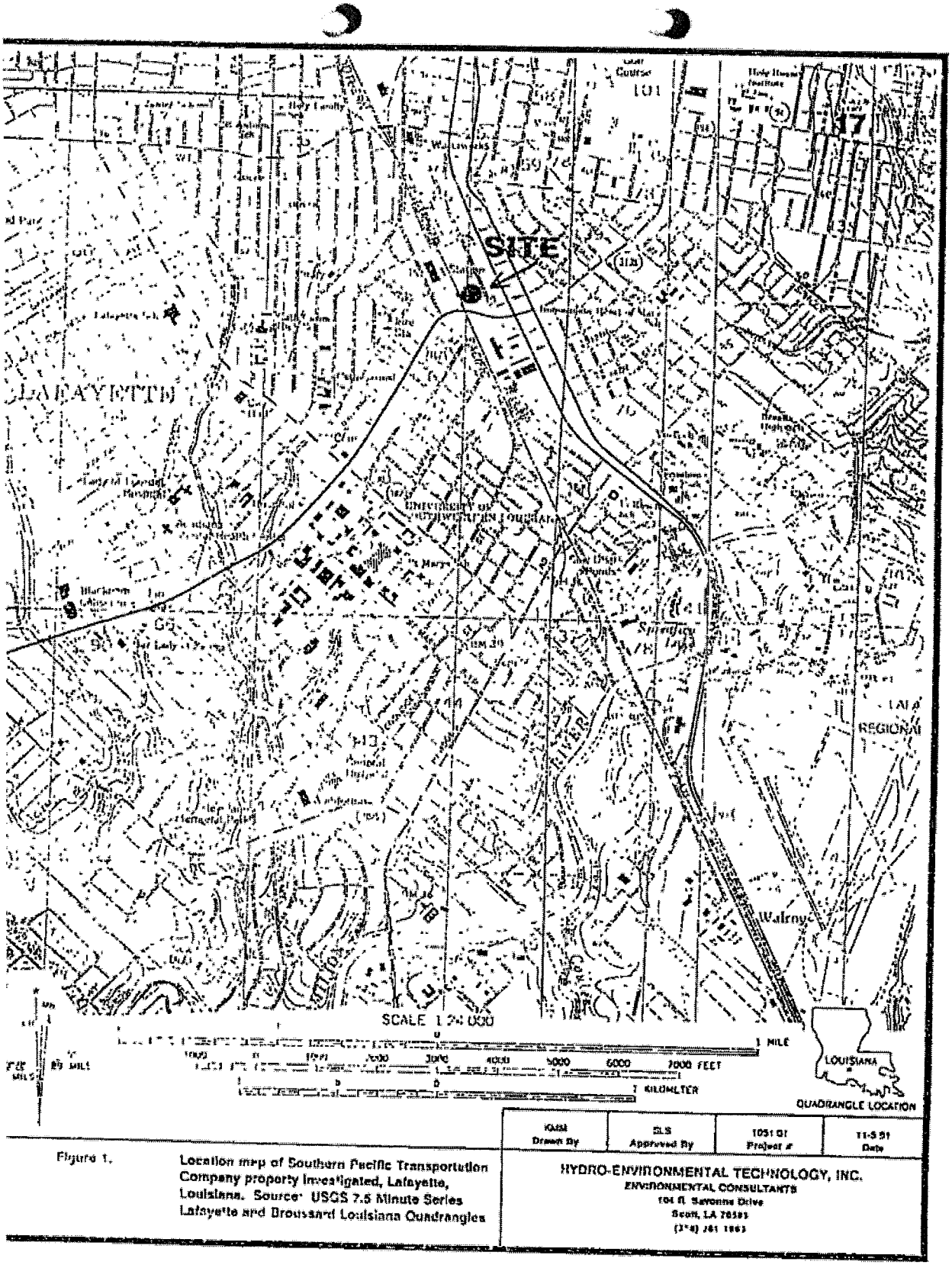
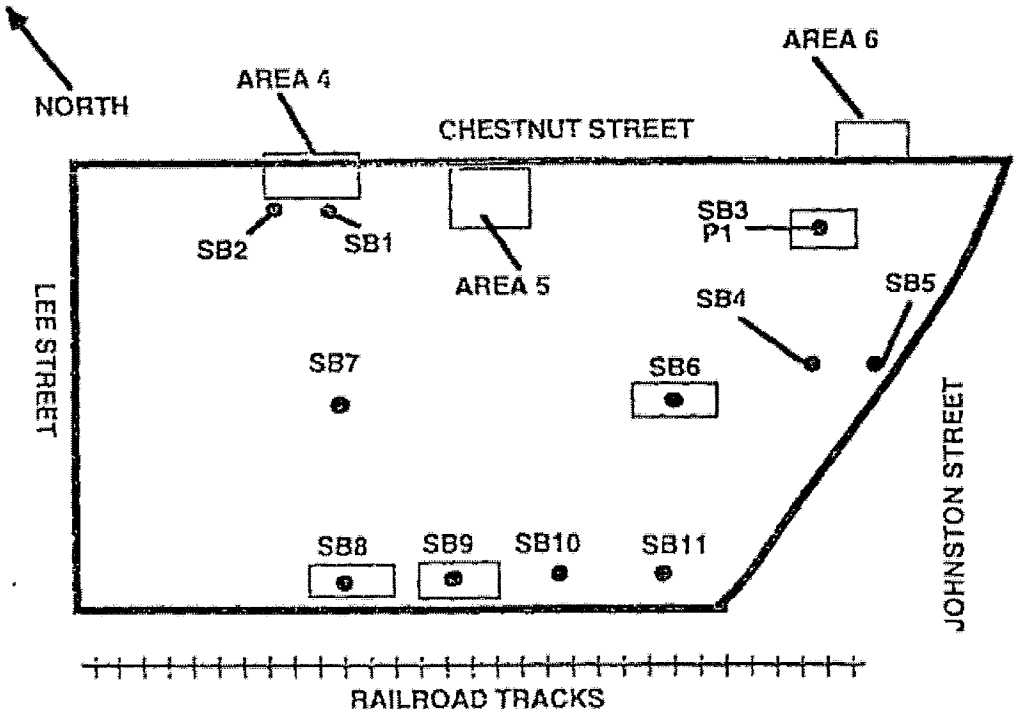


Figure 1. Location map of Southern Pacific Transportation Company property investigated, Lafayette, Louisiana. Source: USGS 7.5 Minute Series Lafayette and Broussard Louisiana Quadrangles

KMM Drawn By	SLS Approved By	1051 01 Project #	11-5 91 Date

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
ENVIRONMENTAL CONSULTANTS
104 N. Savonna Drive
Scott, LA 70583
(318) 261 1863

18



EXPLANATION

AREA INVESTICATED

SOIL BORING LOCATION

SOUTHERN PACIFIC PROPERTY BOUNDARY

0 120 240

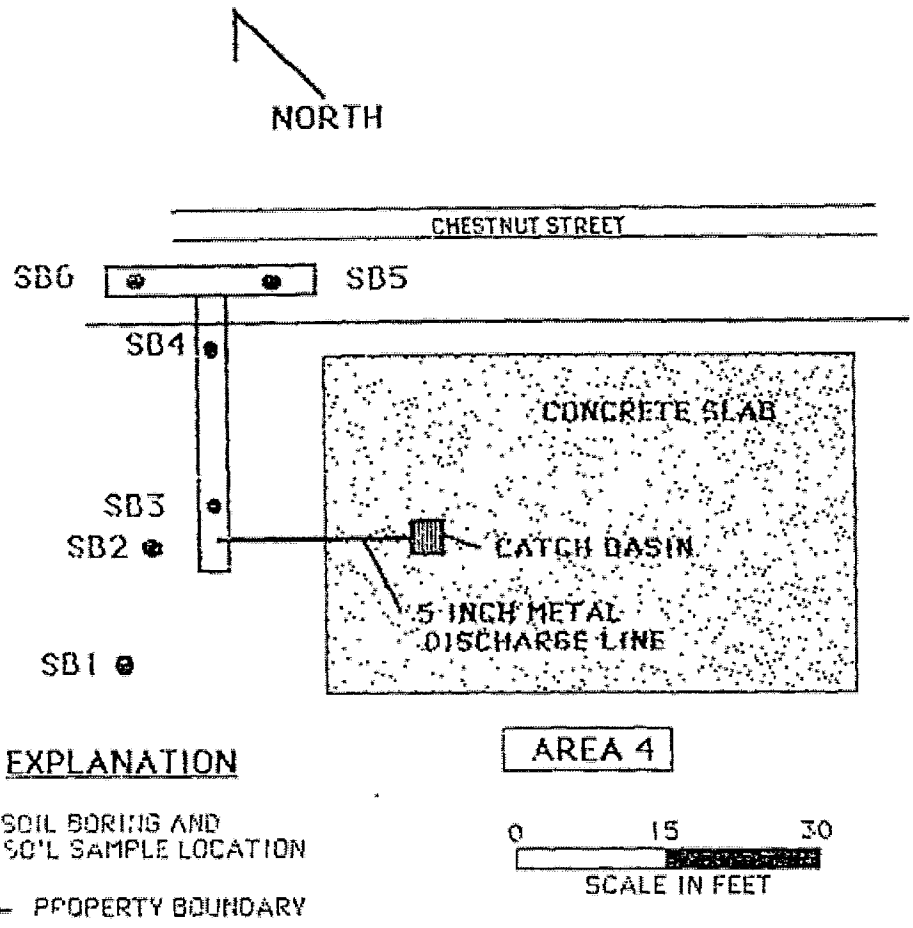
SCALE IN FEET

KWM	SLS	1051 02	12-07-01
Drawn By	Approved By	Project #	Date

Figure 2. Site Plan Map showing locations of areas investigated and soil borings installed during this investigation.

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
ENVIRONMENTAL CONSULTANTS
104 R. Savonne Drive
Scott, LA 70583
(318) 261-1963

19



XWM	SLT	1051 02	12 05 91
Drawn By	Approved By	Project #	Date

Figure 3. Site Plan Map of soil borings installed in investigated Area 4.

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
ENVIRONMENTAL CONSULTANTS
104 ft. Savonne Drive
Scott, LA 70583
(318) 261-1963

20

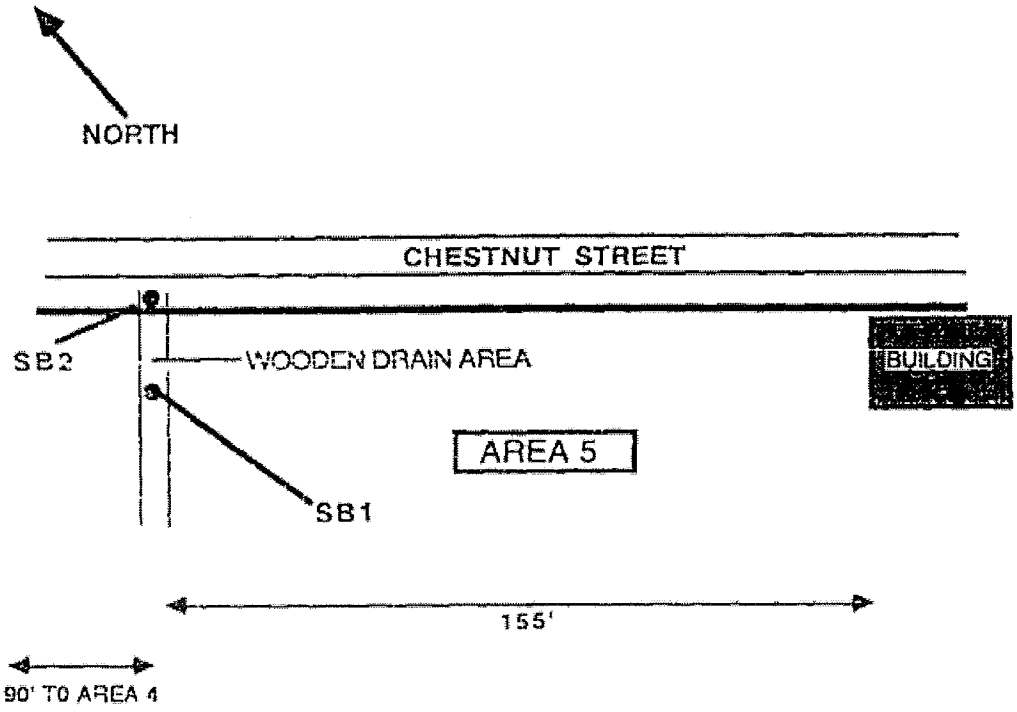


Figure 4 Site Plan Map of soil borings installed in investigated Area 5.

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
ENVIRONMENTAL CONSULTANTS
104 R. Savonne Drive
Scott, LA 70583

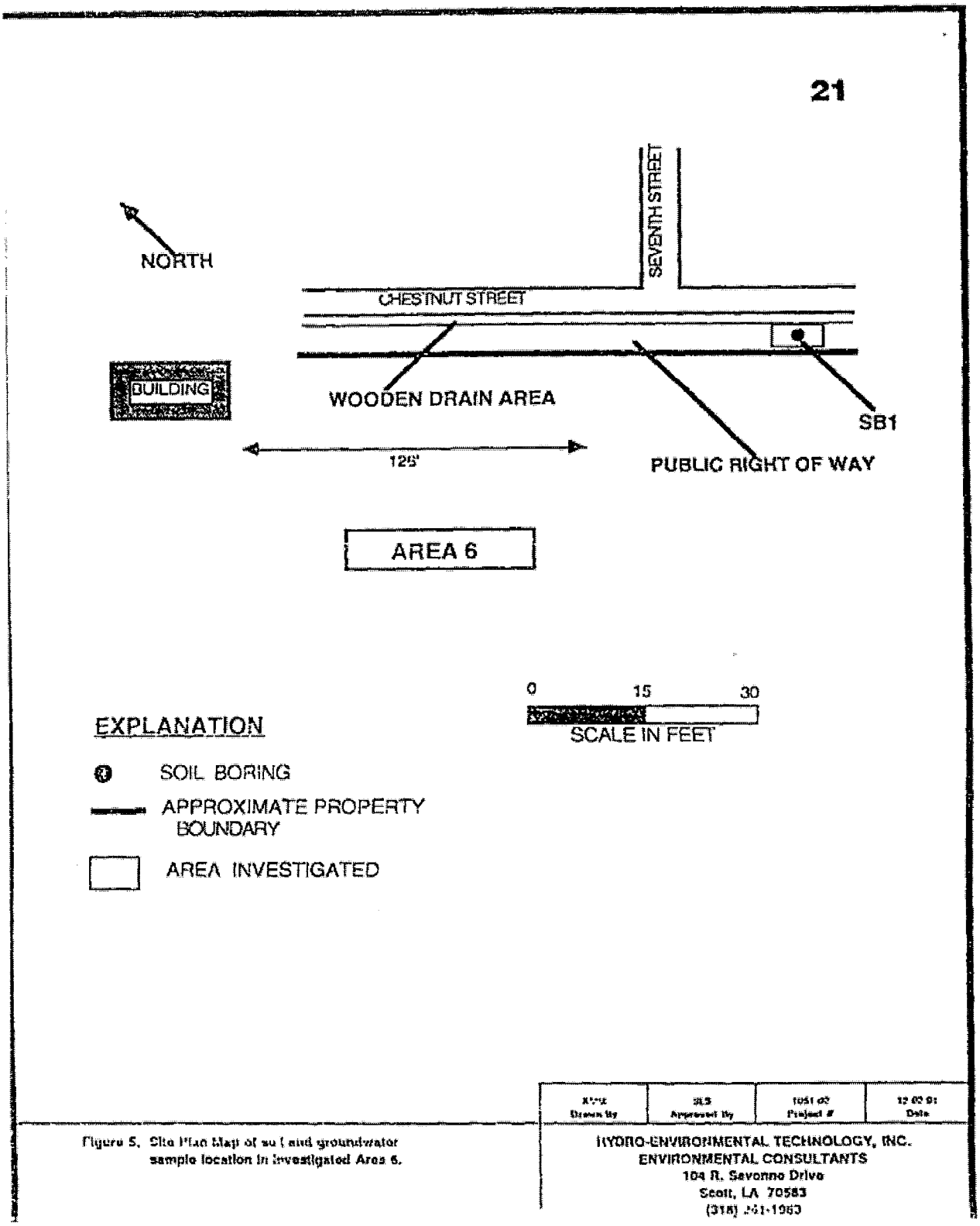


Figure 5. Site Plan Map of soil and groundwater sample location in investigated Area 6.

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
ENVIRONMENTAL CONSULTANTS
104 R. Savonna Drive
Scott, LA 70583
(318) 261-1963

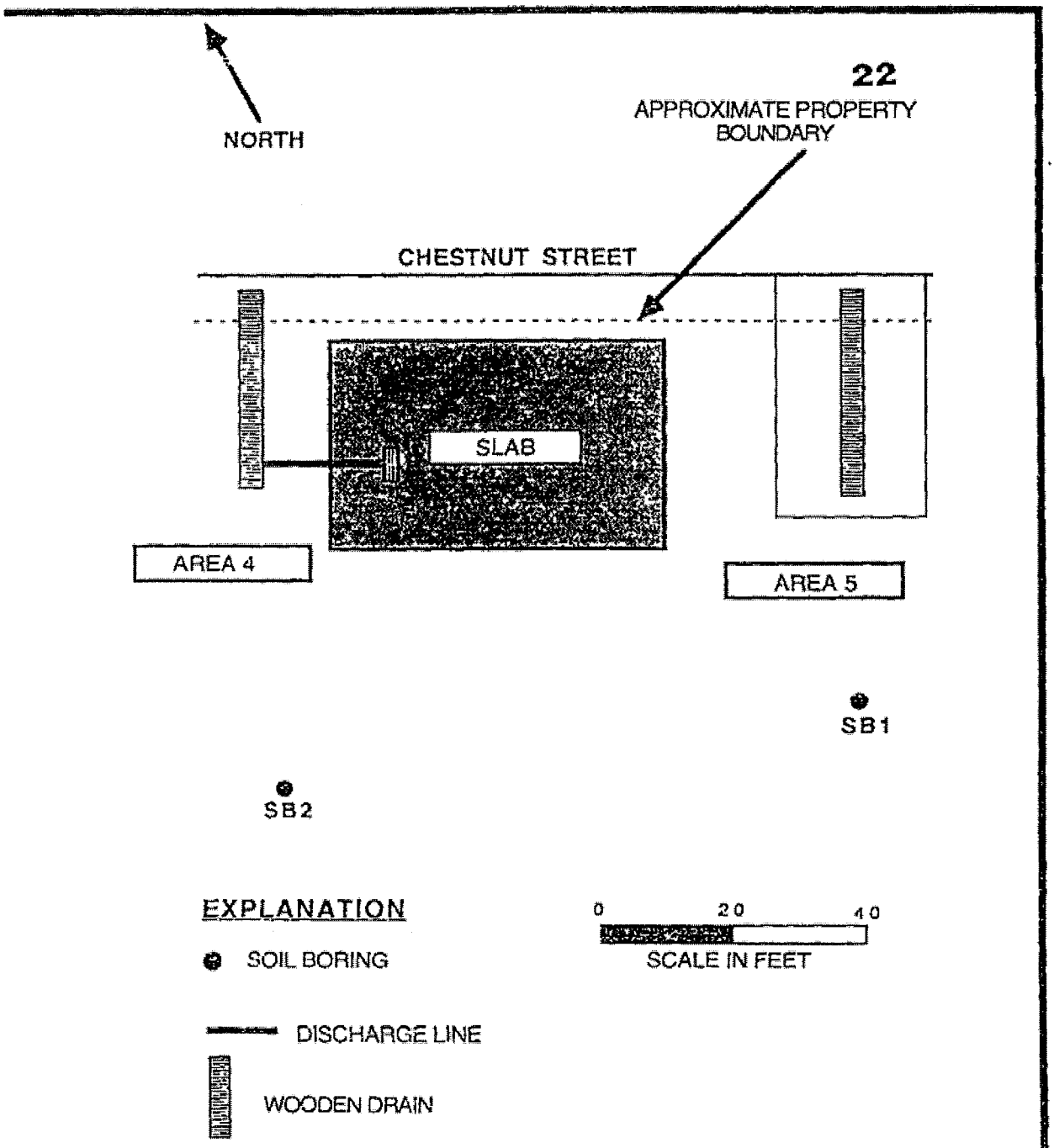


Figure 6 Site Plan Map showing the location of soil borings SB1 and SB2.

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
ENVIRONMENTAL CONSULTANTS
104 ft. Savanna Drive
Scott, LA 70583
(318) 261 1911

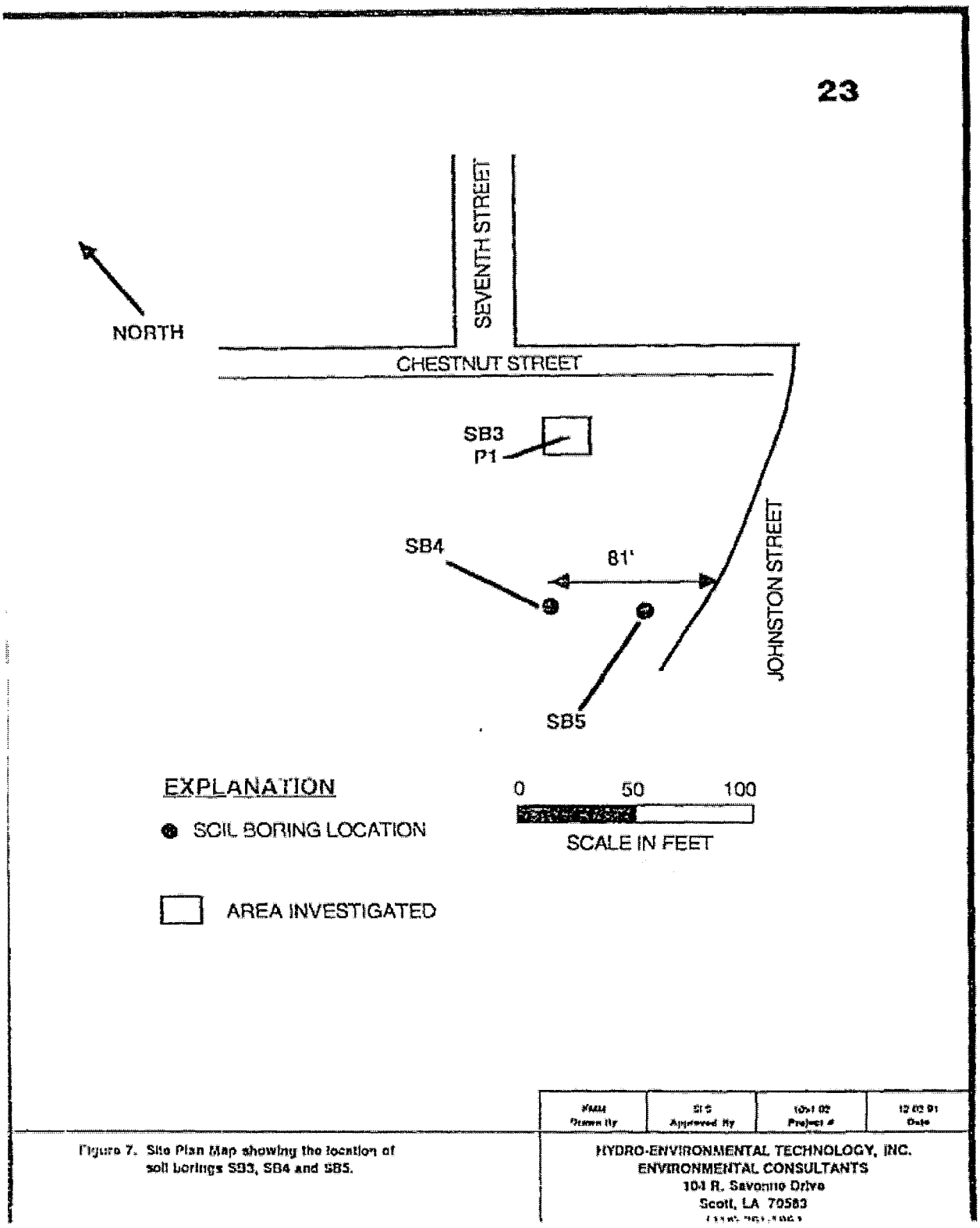
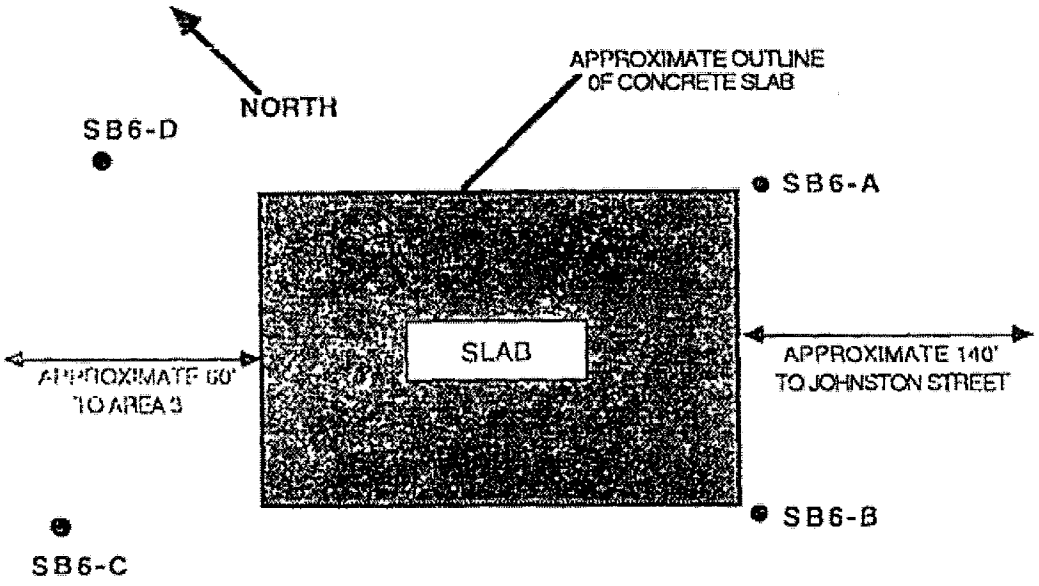


Figure 7. Site Plan Map showing the location of soil borings SB3, SB4 and SB5.

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
ENVIRONMENTAL CONSULTANTS
104 R. Savonne Drive
Scott, LA 70583

24



EXPLANATION

● SOIL BORING LOCATION

0 10 20
SCALE IN FEET

KVM Drawn By	SS Approved By	1051-02 Project #	12-02-01 Date

Figure 6. Site Plan Map of soil borings installed to formulate composite soil sample SB6.

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
ENVIRONMENTAL CONSULTANTS
104 R. Savoime Drive
Scott, LA 70583

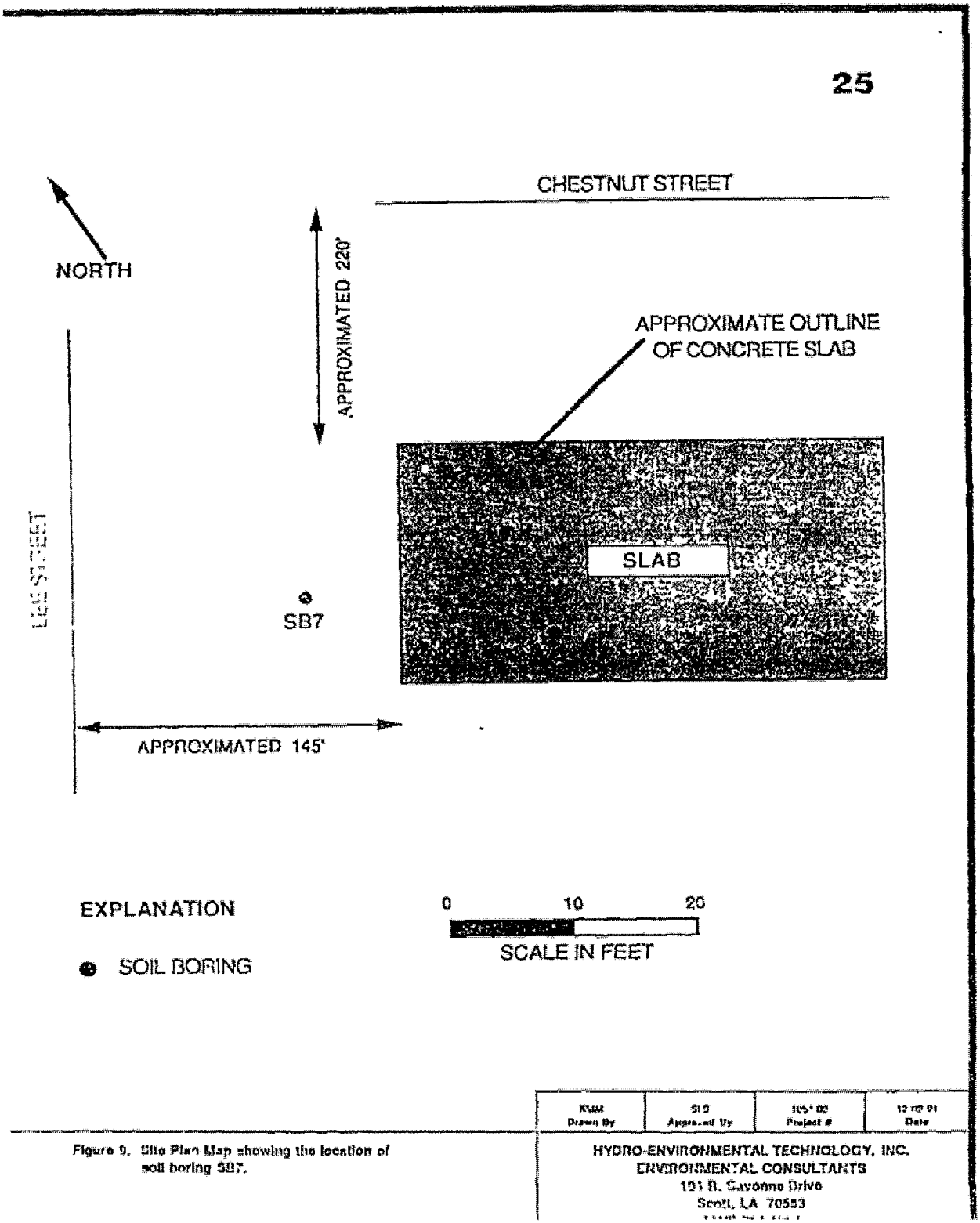


Figure 9. Site Plan Map showing the location of soil boring SB7.

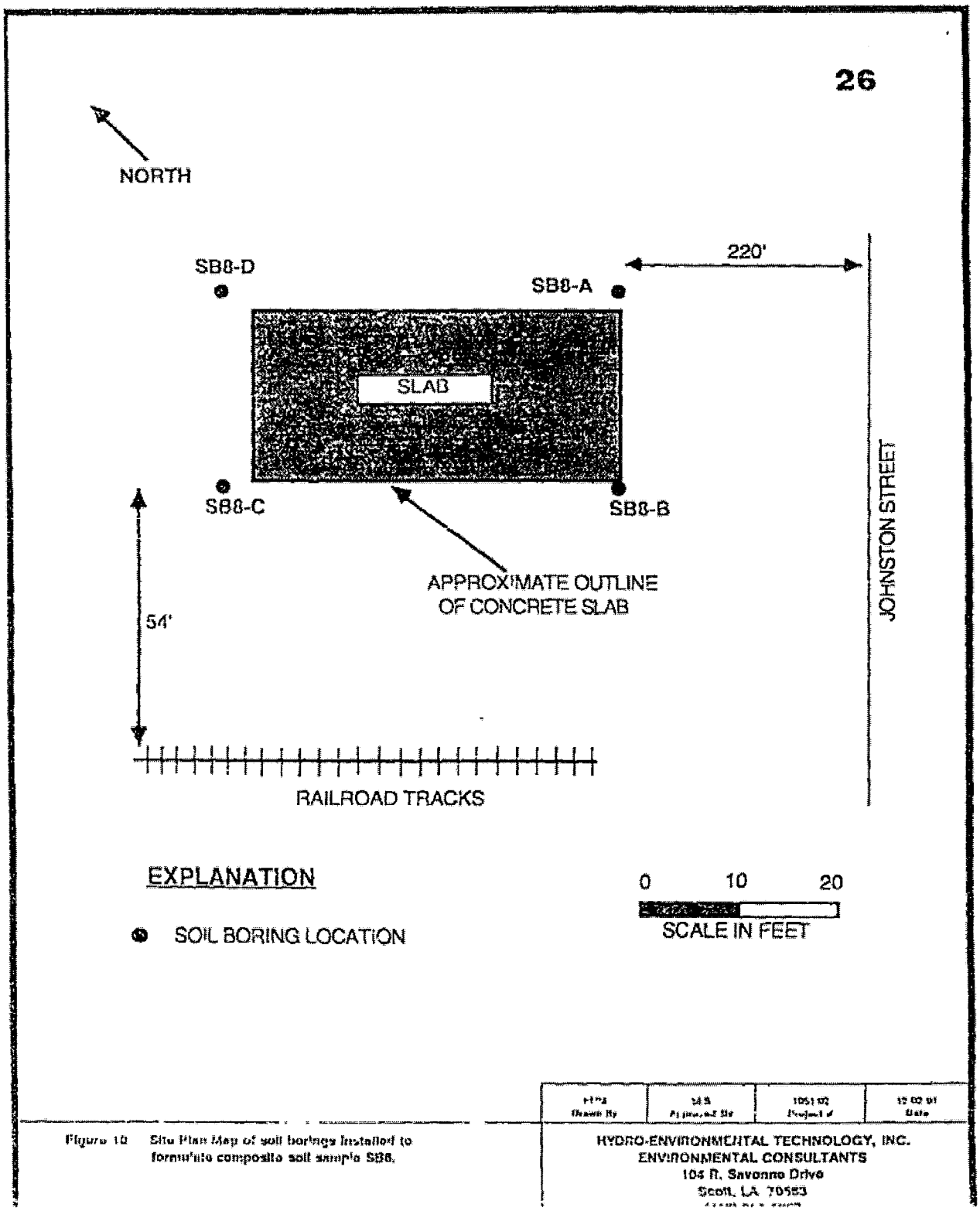
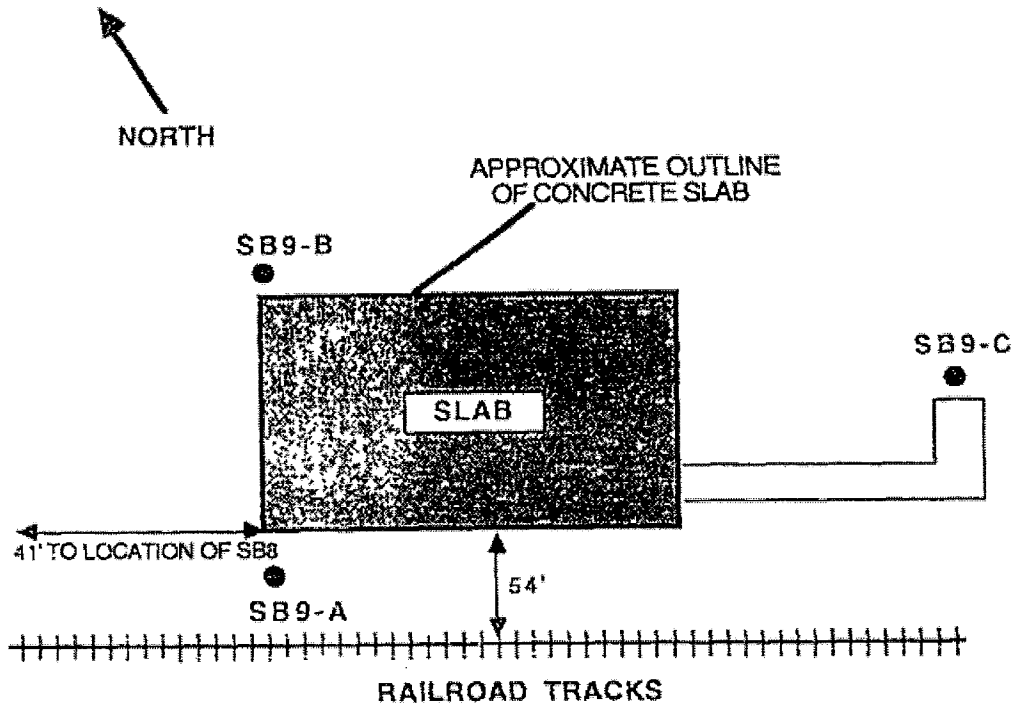


Figure 10 Site Plan Map of soil borings installed to formulate composite soil sample SB8.

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
ENVIRONMENTAL CONSULTANTS
104 R. Savonne Drive
Scott, LA 70583

27



EXPLANATION

● SOIL BORING LOCATION

0 0 8 1 6

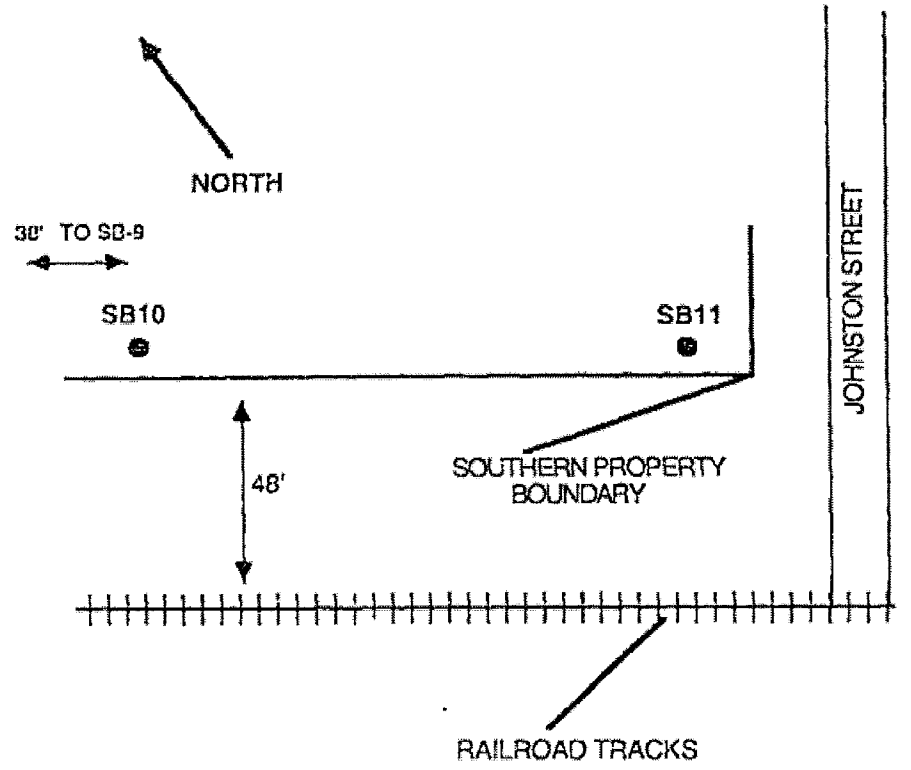
APPROXIMATE SCALE IN FEET

KMM Drawn By	SLS Approved By	1051 02 Project #	12-02-01 Date

Figure 11. Site Plan Map of soil borings installed to formulate composite soil sample SB9.

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
ENVIRONMENTAL CONSULTANTS
104 R. Savanne Drive
Scott, LA 70583
(318) 261-1063

28



KMS Drawn By	SLS Approved By	1051 02 Project #	12-02-01 Date

Figure 12. Site Plan Map showing location of soil borings SB10 and SB11.

HYDRO-ENVIRONMENTAL TECHNOLOGY, INC.
ENVIRONMENTAL CONSULTANTS
104 R. Savonne Drive
Scott, LA 70583
(318) 261-1963

APPENDIX A

LABORATORY ANALYSIS

research analysis consultation
EFEH & ASSOCIATES
10919 SAGEWIND DRIVE • HOUSTON, TEXAS 77089 • TELEPHONE (713) 484-2142

November 19, 1991

Mr. S. Stover
Hydro-Environmental Technology, Inc.
Environmental Consultants
P.O. Box 31203
Lafayette, Louisiana 70593-1203

Dear Mr. Stover:

Following are the results of the soil sample submitted to our laboratory for analyses on November 15, 1991:

SITE: City of Lafayette; Lafayette, Louisiana

P.O. #: 1051.03

SAMPLE I.D.	Area 4 SB1 @ 2-3' bls. 11/13/91 14:30
LAB NO.	E-4066
TPH, mg/kg	16.0
TOTAL METALS	
Arsenic, mg/kg	<0.01
Barium, mg/kg	<0.05
Cadmium, mg/kg	<0.005
Chromium, mg/kg	16.07
Copper, mg/kg	2.50
Lead, mg/kg	0.19
Mercury, mg/kg	<0.002
Nickel, mg/kg	0.32
Selenium, mg/kg	<0.01
Silver, mg/kg	<0.01
Zinc, mg/kg	24.95
VOLATILES	
Chloromethane	<1

EFEH & ASSOCIATES

SAMPLE I.D.	Area 4 SB1 @ 2-3' bls. 11/13/91 14:30
LAB NO.	E-4066
Vinyl Chloride	<1
Chloroethane	<1
Bromoethane	<1
Trichlorofluoromethane	<1
1,1-Dichloroethane	<1
Methylene Chloride	7
Trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
2,2-Dichloropropane	<1
Cis-1,2-Dichloroethane	<1
Chloroform	3
Bromochloromethane	<1
1,1,1-Trichloroethane	10
1,1-Dichloropropene	<1
Carbon Tetrachloride	<1
Benzene	1
1,2-Dichloroethane	<1
Trichloroethene	<1
1,2-Dichloropropane	<1
Bromodichloromethane	<1
Dibromomethane	<1
Cis-1,3-Dichloropropene	<1
Toluene	1
Trans-1,3-Dichloropropene	<1
1,1,2-Trichloroethane	<1
Tetrachloroethene	<1
1,3-Dichloropropane	<1
Dibromochloromethane	<1
1,2-Dibromoethane	<1
Chlorobenzene	<1
1,1,1,2-Tetrachloroethane	<1
Ethyl Benzene	<1
M,P-Xylenes	2
O-Xylene	<1
Styrene	<1
Isopropylbenzene	<1
Bromoform	<1
1,1,2,2-Tetrachloroethane	<1
1,2,3-Trichloropropane	<1
N-Propylbenzene	<1
Bromobenzene	<1
2-Chlorotoluene	<1
1,3,5-Trimethyl-Benzene	2
4-Chlorotoluene	<1

EFEH & ASSOCIATES

SAMPLE I.D.	Area 4 SB1 @ 2-3' bls. 11/13/91 14:30
LAB NO.	E-4066
Tert-Butylbenzene	<1
1,2,4-Trimethylbenzene	2
Sec-Butylbenzene	<1
P-Isopropyltoluene	<1
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	1
N-Butylbezene	<1
1,2-Dichlorobenzene	1
Xylenes, (Total)	<5
1,2-Dichloroethene	<10

NOTE: Units expressed in ug/l, unless otherwise noted.

METHODS: TPH - EPA 418.1
TOTAL METALS - EPA 7060/7080/7130/7190/7420/7471/7741/7760/7950/7210/7520
VOLATILES - EPA 8240

Please contact me if you have any questions concerning these results.

Sincerely,

Edwin B. Smith, Jr.

Edwin B. Smith, Jr. PhD

research analyses consultation
EFEH & ASSOCIATES
10919 SAGEWIND DRIVE • HOUSTON, TEXAS 77089 • TELEPHONE (713) 484-2362

November 19, 1991

Mr. S. Stover
Hydro-Environmental Technology, Inc.
Environmental Consultants
P.O. Box 31203
Lafayette, Louisiana 70593-1203

Dear Mr. Stover:

Following are the results of the soil sample submitted to our laboratory for analyses on November 15, 1991:

SITE: City of Lafayette; Lafayette, Louisiana

P.O. #: 1051.03

SAMPLE I.D.	Area 4 SB4 @ 7-8' bls. 11/13/91 15:00
LAB NO.	E-4067
TPH, mg/kg	9.7

TOTAL METALS

Arsenic, mg/kg	<0.01
Barium, mg/kg	<0.05
Cadmium, mg/kg	<0.005
Chromium, mg/kg	14.11
Copper, mg/kg	3.26
Lead, mg/kg	0.28
Mercury, mg/kg	<0.002
Nickel, mg/kg	0.97
Selenium, mg/kg	<0.01
Silver, mg/kg	<0.01
Zinc, mg/kg	14.71

VOLATILES

Chloromethane	<1

EFEH & ASSOCIATES

SAMPLE I.D.	Area 4 SB4 @ 7-8' bls. 11/13/91 15:00
LAB NO.	E-4067
Vinyl Chloride	<1
Chloroethane	<1
Bromoethane	<1
Trichlorofluoromethane	7
1,1-Dichloroethene	<1
Methylene Chloride	3
Trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
2,2-Dichloropropane	<1
CIS-1,2-Dichloroethene	<1
Chloroform	3
Bromochloromethane	36
1,1,1-Trichloroethane	<1
1,1-Dichloropropene	<1
Carbon Tetrachloride	<1
Benzene	<1
1,2-Dichloroethane	<1
Trichloroethene	<1
1,2-Dichloropropane	<1
Bromodichloromethane	<1
Dibromomethane	<1
Cis-1,3-Dichloropropene	<1
Toluene	<1
Trans-1,3-Dichloropropene	<1
1,1,2-Trichloroethane	<1
Tetrachloroethene	1
1,3-Dichloropropane	<1
Dibromochloromethane	<1
1,2-Dibromoethane	<1
Chlorobenzene	<1
1,1,1,2-Tetrachloroethane	<1
Ethyl Benzene	<1
M,P-Xylenes	<1
O-Xylene	<1
Styrene	<1
Isopropylbenzene	<1
Bromoform	<1
1,1,2,2-Tetrachloroethane	<1
1,2,3-Trichloropropane	<1
N-Propylbenzene	<1
Bromobenzene	<1
2-Chlorotoluene	<1
1,3,5-Trimethyl-Benzene	2
4-Chlorotoluene	<1

EFEH & ASSOCIATES

SAMPLE I.D.	Area 4 SB4 @ 7-8' bls. 11/13/91 15:00
LAB NO.	E-4067
Tert-Butylbenzene	<1
1,2,4-Trimethylbenzene	<1
Sec-Butylbenzene	<1
P-Isopropyltoluene	<1
1,3-Dichlorobenzene	2
1,4-Dichlorobenzene	2
N-Butylbezene	<1
1,2-Dichlorobenzene	2
Xylenes, (Total)	<5
1,2-Dichloroethene	<10

NOTE: Units expressed in ug/l, unless otherwise noted.

METHODS: TPH - EPA 418.1
TOTAL METALS - EPA 7060/7080/7130/7190/7420/7471/7741/7760/7950/7210/7520
VOLATILES - EPA 8240

Please contact me if you have any questions concerning these results.

Sincerely,

Edwin B. Smith, Jr.

Edwin B. Smith, Jr. PhD

research analyses consultation
EFEH & ASSOCIATES
10919 SAGEWIND DRIVE • HOUSTON, TEXAS 77089 • TELEPHONE (713) 484-2362

November 19, 1991

Mr. S. Stover
Hydro-Environmental Technology, Inc.
Environmental Consultants
P.O. Box 31203
Lafayette, Louisiana 70593-1203

Dear Mr. Stover:

Following are the results of the soil sample submitted to our laboratory for analyses on November 15, 1991:

SITE: City of Lafayette; Lafayette, Louisiana

P.O. #: 1051.03

SAMPLE I.D.	Area 4 SB5 @ 10-11' bls. 11/13/91 16:45
LAB NO.	E-4068
TPH, mg/kg	7.4
TOTAL METALS	
Arsenic, mg/kg	<0.01
Barium, mg/kg	<0.05
Cadmium, mg/kg	<0.005
Chromium, mg/kg	6.27
Copper, mg/kg	4.23
Lead, mg/kg	0.76
Mercury, mg/kg	<0.002
Nickel, mg/kg	1.30
Selenium, mg/kg	<0.01
Silver, mg/kg	<0.01
Zinc, mg/kg	14.21
VOLATILES	
Chloromethane	<1

EFEH & ASSOCIATES

SAMPLE I.D.	Area 4 SB5 @ 10-11' bls. 11/13/91 16:45
LAB NO.	E-4068
Vinyl Chloride	<1
Chloroethane	<1
Bromoethane	<1
Trichlorofluoromethane	<1
1,1-Dichloroethane	<1
Methylene Chloride	30
Trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	13
2,2-Dichloropropane	<1
CIS-1,2-Dichloroethane	<1
Chloroform	3
Bromochloromethane	38
1,1,1-Trichloroethane	3
1,1-Dichloropropene	<1
Carbon Tetrachloride	<1
Benzene	126
1,2-Dichloroethane	<1
Trichloroethene	24
1,2-Dichloropropane	<1
Bromodichloromethane	<1
Dibromomethane	1
Cis-1,3-Dichloropropene	<1
Toluene	76
Trans-1,3-Dichloropropene	<1
1,1,2-Trichloroethane	<1
Tetrachloroethene	131
1,3-Dichloropropane	<1
Dibromochloromethane	<1
1,2-Dibromoethane	<1
Chlorobenzene	<1
1,1,1,2-Tetrachloroethane	<1
Ethyl Benzene	122
M,P-Xylenes	163
O-Xylene	172
Styrene	39
Isopropylbenzene	12
Bromoform	<1
1,1,2,2-Tetrachloroethane	<1
1,2,3-Trichloropropane	<1
N-Propylbenzene	25
Bromobenzene	<1
2-Chlorotoluene	<1
1,3,5-Trimethyl-Benzene	50
4-Chlorotoluene	<1

EFEH & ASSOCIATES

SAMPLE I.D.	Area 4 SB5 @ 10-11' bls. 11/13/91 16:45
LAB NO.	E-4068
Tert-Butylbenzene	<1
1,2,4-Trimethylbenzene	54
Sec-Butylbenzene	21
P-Isopropyltoluene	<1
1,3-Dichlorobenzene	592
1,4-Dichlorobenzene	567
N-Butylbezene	<1
1,2-Dichlorobenzene	<1
Xylenes, (Total)	<5
1,2-Dichloroethene	24

NOTE: Units expressed in ug/l, unless otherwise noted.

METHODS: TPH - EPA 418.1
TOTAL METALS - EPA 7060/7080/7130/7190/7420/7471/7741/7760/7950/7210/7520
VOLATILES - EPA 8240

Please contact me if you have any questions concerning these results.

Sincerely,

Edwin B. Smith, Jr. PhD

research · analysis · consultation
EFEH & ASSOCIATES
10919 EAGLEWIND DRIVE • HOUSTON, TEXAS 77089 • TELEPHONE (713) 484-2362

November 19, 1991

Mr. S. Stover
Hydro-Environmental Technology, Inc.
Environmental Consultants
P.O. Box 31203
Lafayette, Louisiana 70593-1203

Dear Mr. Stover:

Following are the results of the soil sample submitted to our laboratory for analyses on November 15, 1991:

SITE: City of Lafayette; Lafayette, Louisiana

P.O. #: 1051.03

SAMPLE I.D.	Area 4 SB6 @ 9.5-10.5' bls. 11/13/91 17:05
LAB NO.	E-4069
TPH, mg/kg	9.7
TOTAL METALS	
Arsenic, mg/kg	<0.01
Barium, mg/kg	<0.05
Cadmium, mg/kg	<0.005
Chromium, mg/kg	6.27
Copper, mg/kg	5.19
Lead, mg/kg	0.44
Mercury, mg/kg	<0.002
Nickel, mg/kg	0.48
Selenium, mg/kg	0.02
Silver, mg/kg	<0.01
Zinc, mg/kg	25.61
VOLATILES	
Chloromethane	<1

EFEH & ASSOCIATES

SAMPLE I.D.	Area 4 SB6 @ 9.5-10.5' bls. 11/13/91 17:05
LAB NO.	E-4069
Vinyl Chloride	<1
Chloroethane	<1
Bromoethane	<1
Trichlorofluoromethane	<1
1,1-Dichloroethane	<1
Methylene Chloride	3
Trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
2,2-Dichloropropane	<1
CIS-1,2-Dichloroethane	<1
Chloroform	3
Bromochloromethane	37
1,1,1-Trichloroethane	<1
1,1-Dichloropropene	<1
Carbon Tetrachloride	<1
Benzene	2
1,2-Dichloroethane	<1
Trichloroethene	<1
1,2-Dichloropropane	<1
Bromodichloromethane	<1
Dibromomethane	<1
Cis-1,3-Dichloropropene	<1
Toluene	<1
Trans-1,3-Dichloropropene	<1
1,1,2-Trichloroethane	<1
Tetrachloroethene	<1
1,3-Dichloropropane	<1
Dibromochloromethane	<1
1,2-Dibromoethane	<1
Chlorobenzene	<1
1,1,1,2-Tetrachloroethane	<1
Ethyl Benzene	<1
M,P-Xylenes	3
O-Xylene	3
Styrene	<1
Isopropylbenzene	<1
Bromoform	<1
1,1,2,2-Tetrachloroethane	<1
1,2,3-Trichloropropane	<1
N-Propylbenzene	<1
Bromobenzene	<1
2-Chlorotoluene	<1
1,3,5-Trimethyl-Benzene	7
4-Chlorotoluene	<1

EFEH & ASSOCIATES

SAMPLE I.D.	Area 4 SB6 @ 9.5-10.5' bls. 11/13/91 17:05
LAB NO.	E-4069
Tert-Butylbenzene	<1
1,2,4-Trimethylbenzene	2
Sec-Butylbenzene	<1
P-Isopropyltoluene	<1
1,3-Dichlorobenzene	<1
1,4-Dichlorobenzene	<1
N-Butylbezene	<1
1,2-Dichlorobenzene	<1
Xylenes, (Total)	<5
1,2-Dichloroethene	<10

NOTE: Units expressed in ug/l, unless otherwise noted.

METHODS: TPH - EPA 418.1
TOTAL METALS - EPA 7060/7080/7130/7190/7420/7471/7741/7760/7950/7210/7520
VOLATILES - EPA 8240

Please contact me if you have any questions concerning these results.

Sincerely,

Edwin B. Smith, Jr.

Edwin B. Smith, Jr. PhD

research analysis consultation
EFEH & ASSOCIATES
10919 SAGEWIND DRIVE • HOUSTON, TEXAS 77089 • TELEPHONE (713) 484-2262

November 19, 1991

Mr. S. Stover
Hydro-Environmental Technology, Inc.
Environmental Consultants
P.O. Box 31203
Lafayette, Louisiana 70593-1203

Dear Mr. Stover:

Following are the results of the soil sample submitted to our laboratory for analyses on November 15, 1991:

SITE: City of Lafayette; Lafayette, Louisiana

P.O. #: 1051.03

SAMPLE I.D.	Area 5 SB1 @ 2-3' bls. 11/13/91 15:45
LAB NO.	E-4070
TPH, mg/kg	41.3
TOTAL METALS	
Arsenic, mg/kg	<0.01
Barium, mg/kg	<0.05
Cadmium, mg/kg	0.33
Chromium, mg/kg	5.49
Copper, mg/kg	4.23
Lead, mg/kg	33.07
Mercury, mg/kg	<0.002
Nickel, mg/kg	0.32
Selenium, mg/kg	0.02
Silver, mg/kg	<0.01
Zinc, mg/kg	157.59
VOLATILES	
Chloromethane	<1

EFEH & ASSOCIATES

SAMPLE I.D.	Area 5 SB1 @ 2-3' bls. 11/13/91 15:45
LAB NO.	E-4070
Vinyl Chloride	<1
Chloroethane	<1
Bromoethane	<1
Trichlorofluoromethane	<1
1,1-Dichloroethane	<1
Methylene Chloride	132
Trans-1,2-Dichloroethene	2
1,1-Dichloroethane	9
2,2-Dichloropropane	<1
CIS-1,2-Dichloroethane	<1
Chloroform	3
Bromochloromethane	38
1,1,1-Trichloroethane	2
1,1-Dichloropropene	<1
Carbon Tetrachloride	<1
Benzene	102
1,2-Dichloroethane	<1
Trichloroethene	24
1,2-Dichloropropane	<1
Bromodichloromethane	<1
Dibromomethane	<1
Cis-1,3-Dichloropropene	<1
Toluene	57
Trans-1,3-Dichloropropene	3
1,1,2-Trichloroethane	<1
Tetrachloroethene	101
1,3-Dichloropropane	<1
Dibromochloromethane	<1
1,2-Dibromoethane	<1
Chlorobenzene	<1
1,1,1,2-Tetrachloroethane	<1
Ethyl Benzene	101
M,P-Xylenes	133
O-Xylene	121
Styrene	<1
Isopropylbenzene	14
Bromoform	<1
1,1,2,2-Tetrachloroethane	<1
1,2,3-Trichloropropane	<1
N-Propylbenzene	32
Bromobenzene	<1
2-Chlorotoluene	<1
1,3,5-Trimethyl-Benzene	217
4-Chlorotoluene	<1

ETEH & ASSOCIATES

SAMPLE I.D.	Area 5 SB1 @ 2-3' bls. 11/13/91 15:45
LAB NO.	E-4070
Tert-Butylbenzene	<1
1,2,4-Trimethylbenzene	67
Sec-Butylbenzene	36
P-Isopropyltoluene	<1
1,3-Dichlorobenzene	<1
1,4-Dichlorobenzene	<1
N-Butylbezene	2
1,2-Dichlorobenzene	<1
Xylenes, (Total)	<5
1,2-Dichloroethene	24

NOTE: Units expressed in ug/l, unless otherwise noted.

METHODS: TPH - EPA 418.1
TOTAL METALS - EPA 7060/7080/7130/7190/7420/7471/7741/7760/7950/7210/7520
VOLATILES - EPA 8240

Please contact me if you have any questions concerning these results.

Sincerely,

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November 19, 1991

Mr. S. Stover
Hydro-Environmental Technology, Inc.
Environmental Consultants
P.O. Box 31203
Lafayette, Louisiana 70593-1203

Dear Mr. Stover:

Following are the results of the soil sample submitted to our laboratory for analyses on November 15, 1991:

SITE: City of Lafayette; Lafayette, Louisiana

P.O. #: 1051.03

SAMPLE I.D.	Area 6 SB1 @ 7.5-8.5' bls. 11/13/91 16:00
LAB NO.	E-4071
TPH, mg/kg	24.7
TOTAL METALS	
Arsenic, mg/kg	<0.01
Barium, mg/kg	<0.05
Cadmium, mg/kg	<0.005
Chromium, mg/kg	4.70
Copper, mg/kg	3.07
Lead, mg/kg	11.92
Mercury, mg/kg	<0.002
Nickel, mg/kg	<0.01
Selenium, mg/kg	<0.01
Silver, mg/kg	<0.01
Zinc, mg/kg	20.00
VOLATILES	
Chloromethane	<1

EFEH & ASSOCIATES

SAMPLE I.D.	Area 6 SB1 @ 7.5-8.5' bls. 11/13/91 16:00
LAB NO.	E-4071
Vinyl Chloride	<1
Chloroethane	<1
Bromoethane	<1
Trichlorofluoromethane	<1
1,1-Dichloroethane	<1
Methylene Chloride	7
Trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
2,2-Dichloropropane	<1
CIS-1,2-Dichloroethane	<1
Chloroform	3
Bromochloromethane	37
1,1,1-Trichloroethane	2
1,1-Dichloropropene	<1
Carbon Tetrachloride	<1
Benzene	5
1,2-Dichloroethane	<1
Trichloroethene	1
1,2-Dichloropropane	<1
Bromodichloromethane	<1
Dibromomethane	<1
Cis-1,3-Dichloropropene	<1
Toluene	4
Trans-1,3-Dichloropropene	<1
1,1,2-Trichloroethane	<1
Tetrachloroethene	6
1,3-Dichloropropane	<1
Dibromochloromethane	<1
1,2-Dibromoethane	<1
Chlorobenzene	<1
1,1,1,2-Tetrachloroethane	<1
Ethyl Benzene	7
M,P-Xylenes	9
O-Xylene	8
Styrene	2
Isopropylbenzene	1
Bromoform	<1
1,1,2,2-Tetrachloroethane	<1
1,2,3-Trichloropropane	<1
N-Propylbenzene	3
Bromobenzene	<1
2-Chlorotoluene	<1
1,3,5-Trimethyl-Benzene	5
4-Chlorotoluene	<1

EFEH & ASSOCIATES

SAMPLE I.D.	Area 6 SB1 @ 7.5-8.5' bls. 11/13/91 16:00
LAB NO.	E-4071
Tert-Butylbenzene	<1
1,2,4-Trimethylbenzene	16
Sec-Butylbenzene	<1
P-Isopropyltoluene	<1
1,3-Dichlorobenzene	<1
1,4-Dichlorobenzene	3
N-Butylbezene	1
1,2-Dichlorobenzene	33
Xylenes, (Total)	<5
1,2-Dichloroethene	<10

NOTE: Units expressed in ug/l, unless otherwise noted.

METHODS: TPH - EPA 418.1
TOTAL METALS - EPA 7060/7080/7130/7190/7420/7471/7741/7760/7950/7210/7520
VOLATILES - EPA 8240

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